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# Patient and staff perceptions of hospitalization in general hospitals.

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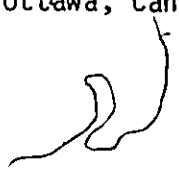
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PATIENT AND STAFF PERCEPTIONS  
OF HOSPITALIZATION IN GENERAL HOSPITALS

by

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### Abstract

Since serious research into the effects of hospitalization on nursing staff and patients in general hospitals is virtually non-existent, any strategy or recommendation for improving the economy and effectiveness of Ontario's health care delivery system must be preceded by an examination of how staff and patients presently perceive their hospital experience.

Seven variables were hypothesized to be the main factors influencing patient and staff perceptions. A pilot questionnaire was designed following a Likert (1967) format which arranged the items on a continuum ranging from a non-participative tendency to a participative tendency. The questionnaire was given to 78 medical-surgical patients in a general hospital. Subsequent factor analysis indicated four main item groupings. The questionnaire was revised in light of that analysis and a satisfaction dimension included as well.

The revised questionnaire which contained 36 items for patients and 37 items for staff was distributed to 123 patients and 115 staff members from two similar general hospitals. In addition staff completed Likert's "Profile of Organizational Characteristics (Form S)" which has been shown to measure six organizational dimensions.

Separate factor analyses were conducted for patients and staff. For purposes of comparing factor patterns, patient and staff responses were factor analyzed together. To establish differences between hospitals and patients and staff, appropriate multivariate analysis on both factor scores and individual item responses were performed.

Results showed significant differences between hospitals, between patients and staff, and a significant interaction effect.

Nine factors were identified which were labelled: Support/Competency, Doctor/Patient Relations, Patient Tasks, Technical Communication, Responsibility for Environment, Pleased With Accomplishment, Staff Motivation to Perform, and Absence of Depression. A detailed examination of those factors evidencing significant effects was undertaken.

The implications for understanding and/or altering the present health care delivery system in Ontario as well as the identification of critical areas for further research were discussed.

## Preface

As in all efforts of this type a number of people played an important part in the successful completion of this research.

To my advisor, Dr. William Libby, and to the committee members Drs. John LaGaipa and Robert Whitehurst goes my sincere thanks for their excellent direction and constant support.

Mrs. Norma Faus, Miss Mavis Millar, and Mr. Hau Lei, who were kind enough to tolerate my urgent phone calls for help, were responsible for the typing, key punching and computer programming involved in this project.

Special thanks must go to my wife Linda and to my daughter Karen Lynn, who, in spite of some disruption of normal family life, maintained their patient support.

I.D.P.

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### Introduction

"All social institutions or subsystems, whether medical, educational, religious, economic, or political, are required to provide 'proof' of their legitimacy and effectiveness in order to justify society's continued support." (Suchman, 1967, p.2.) Such a requirement has never been so critical as during the present time of severe government financial cutbacks in which the quality of this "proof" directly affects government spending policies, employment levels, the availability of public services, etc. Hospitals, along with other government funded organizations are vigorously vying for their share of the tax dollar.

Political complications become part of the struggle as one recognizes that government performance must itself be justifiable to the public if political longevity is to be assured. Therefore it seems reasonable to deduce that government policies regarding social institutions will be acceptable to the public if the justification for those policies is clearly understood by the public. Furthermore, that understanding is most likely to occur if the data on which the justification is built is gathered from the public in the first place. This present research will suggest that a long overlooked source of "proof" for the effectiveness of medical institutions - the patient - provides valid feedback regarding the effectiveness of nursing care, ward environment, and even organizational management.

Alternatives for "proof finding" or for the evaluation of health care systems are few. Even the concept of evaluating the effectiveness of hospital psychiatric and psychological services (where much of the behavioral scientists' research energy seems to be spent) is relatively new. An annotated bibliography published by Bloom (1966) dealing with program evaluation in mental health during the years 1955 - 1964 cites only 157 references. Another bibliography of evaluative research in mental health (Kent, 1966) cites about 300 references, many of which are limited to examining the effectiveness of psychotherapy.

Much of the more current literature deals with proposed

models for program evaluation (Wellner, Garmize, and Hallweg, 1970), the problems inherent in evaluative research (Epstein and Janowsky, 1969), and the problems involved in defining successful outcome (Ellsworth, et al, 1968; Erickson, 1972). One thing that is clear is that evaluative research of health care services is an exceedingly complex task with many problems which threaten research design and which may, in fact, become politically motivated.

The Glossary of Administrative Terms in Public Health defines evaluative research as:

"The process of determining the value or amount of success in achieving a predetermined objective. It includes at least the following steps: Formulation of the objective, identification of the proper criteria to be used in measuring success, determination and explanation of the degree of success, recommendations for further program activity" (pp. 225-226).

This definition appears compatible with the formulations of Riecken (1952); Anderson (1965); Borgatta (1966) and Suchman (1967). Suchman (1967) goes further to say that evaluative research is characterized by its sole concern with testing the adequacy of existing knowledge, rather than in discovering new knowledge.

### Problems in Health Care Delivery

Since the beginning of the practise of modern medicine the layman has seldom dared to venture behind the veil to ask the practitioner "why? or "how?". This has been true be it his own body and life that are at stake or not. Unfortunately, what seems to have developed in the wake of the incredible advances in medical theory, technology and practise, is that the distance between practitioner and patient has broadened rather considerably.

In usual medical practise, the patient only has to acknowledge and describe his particular physical

problem to his physician. It is a hallowed expectation that the scientific procedures the physician will use can heal bones, limbs, glands, and vital tissue with no more than tacit co-operation from the patient. (von Mering, 1962b)

Szasz and Hollander (1956) describe such a physician-patient relationship as the "activity-passivity" model. Patient input into the healing process has historically been limited to urgent demands for the physician to "do" something.

Doctors who didn't "do" something, no matter what, were not real doctors, just as shamans were not shamans until they turned on the good spirits and turned off the bad ones. (Thomas, 1972)

This pressure on the practitioner to "do" something (be they witchdoctor or physician) has, perhaps, been the foundation stone of the history of medical care. Doctors must at least try, and over generations of trying they have developed the skills of improvisation, of trying whatever came to hand. In this way medical practise has "gone through cyclical fads and fashions . . . ranging from bleeding, cupping, and purging through incantations and the reading of omens, to prefrontal lobotomy and Metrazol convulsions." (Thomas, 1972)

An old but still relevant definition of health care goals is "to cure sometimes, to relieve often, to comfort always". Thomas (1972) in a bit of futurist writing, places health care at a point between the old world of trial-and-error empiricism and superstition, and the new world "just ahead" of hard information and applied science. He goes on to parallel "to cure sometimes" with the development of what he calls "high technology". High technology has provided cures as in immunizations against various virus diseases and as in the effective control of disease such as syphilis and tuberculosis.

Relieving is paralleled to the "halfway technology" of medicine. This is 'after-the-fact' technology, the highest form of which includes feats such as replacing hearts and other organs after the originals have failed.

Comforting, the most communications-oriented objective, corresponds to Thomas' (1972) "non-technology", a substitute for technology that tides patients over through diseases which are not fully understood and for which there is no high technology.

Halfway technology and non-technology, continues Thomas, represent by far the majority of today's expenditures for health and "will sooner or later drive into bankruptcy any system of health care that we may devise". High technology research, on the other hand; is worth any price (Thomas 1972) since it is only the incompleteness of high technologies that necessitate the need for "relieving often" and "comforting always". The ultimate goal of medicine is to cure through high technology. If complete technology is not available for a particular disease the goal of care can suddenly become rather ambiguous and the physician is then forced into "trying" and "doing", "relieving" and "comforting".

Mental illness, asserts von Mering (1962b) requires a different approach. A basic assumption in hospital psychiatry is that the patient and his therapists work toward the same treatment goals (Polak, 1970). In fact, both the patient and society must acknowledge the patients' thinking, feeling and behaviour as "sick" before any sort of objective for care can be set (von Mering, 1962b). "The expectation of therapeutic effect from a clinical relationship of talk, reflection, and listening is also a major departure from traditional scientific medical procedure for diseases of the body." (von Mering, 1962b). Though von Mering paints a rather rosy picture of modern psychiatric care, the fact is that the development of psychiatric objectives and treatments has itself a rather colourful history including the shocking exposes of inhuman custodial care presented by Deutsch (1949), Bockoven (1963), and Goffman (1961); to the more pleasant sounding theories of Jones (1953) and his "therapeutic community"; to today's technology of psychotropic drugs (Linn, 1959; Dinitz et al, 1965). Many, in fact, have claimed that psychotropic drugs are the principle element in the

decline of mental hospital patients since 1950. If this is indeed the case, it seems that medicine and psychiatry are moving closer together under the banner of technology and in so doing hope for an emerging clarity of purpose and function.

Within both general medicine and psychiatry there are three principal groups. There is the doctor with, it is usually assumed, advanced technical knowledge. Thrash (1974), as a matter of fact, concludes that patients are willing to accept the physician's title as a sufficient credential to obey his directives without question. Though the doctor's goal is to stimulate cure as quickly and with as little ambiguity of process as possible, clearly the role of comforter remains the major patient demand to be faced. Thomas (1972) states that it (comforting) "includes the large part of any good doctor's time that is taken up with simply providing reassurance, explaining to patients who fear that they have contracted one or another lethal disease that they are, in fact, quite healthy." Thomas (1972) goes so far as to state that the comforting role may be perceived by the physician as a form of defeat and "only the very best of doctors are good at coping with this kind of defeat." Though Linn (1974) tempers this somewhat by claiming that the common idea that physicians value curing over caring is "somewhat overestimated", the fact is that physicians need to be able to gain the maximum benefit out of whatever time they do spend on comforting their patients.

Nurses are the professionals having the most patient contact opportunities. What then are their objectives? Pettit (1968) suggests that "people are attracted to nursing for the same reason as they have always been - to help others through caring about and caring for". (p.289) "Caring for" patients refers to the practise of clinical nursing with the motivation and acts of "caring for" as evidence of "caring about" the individual. Pettit (1968) goes on to state:

In the context of nursing, the word "comfort" has always been significant. In the sense of a feeling of well

being or the absence of a specific discomfort, comfort has been a desire of both the nurse giving care and the person receiving it . . . For the patient to understand and to be understood has been a mutual concern of the nurse and the patient.

The next sentence is the important one: "It has always been assumed by all that when help was given by a nurse there was a certain knowledge and 'know how' that made it significant to the person as care and part of cure." (Pettit, 1968 p.281) Linn (1974) begins to question that assumption with his finding that the degree to which nurses exclusively value caring has been overestimated. Pettit (1968) believes that in cases where antibiotics are available and cure is virtually certain - in other words, in cases where "high technology" exists (Thomas 1972) - comforting has little to do with recovery (p.290). Cases where no antibiotic has been found offer nurses "more excitement in their practise" (Pettit, 1968).

What is most exciting is that central nursing practises are determining in and of themselves, and are often essential to the success of other's intervention toward enabling the patient to reach his optimal level of health. Excitement exists also because when the nurse is able to enunciate her immediate and/or long term goals for the patient and interpret their significance in terms of the patient's movement toward health, she is able to initiate a collaborative and colleague relationship with other disciplines in working with the patient. (p.291)

Note that the "excitement" comes with her goals for the patient and that one of the benefits of having these goals is that the nurse can collaborate and co-operate with other health professionals who, presumably, also have their own goals for the patient.

Having missed what this researcher believes to be one of the problems in modern health care - the lack of patient involvement in the planning and assessment of his own care - Pettit (1968) does conclude:

Nursing's major conflict is related to acts indicative of caring for and caring about. Nurses believe or suspect that their practises always make a difference. The fact that nursing does not know whether or not this is so, or whether or not some practises make more difference than others, adds to the conflict for nursing. (p.291)



Thus far, then, a review of the literature indicates that both the physician and nurse experience some ambiguity of purpose when there is an absence of high technology leading to cure. Consequently the role of "therapeutic comforting" becomes critical. Many physicians (for want of time, interest or skill) fail to recognize and/or respond to the need for comforting. Many, perhaps, consider this function delegated to the nurses. Nurses, who generally have both opportunity and skill have little knowledge as to what specific comforting behaviors effect what change within the patient.

It is peculiar that the most obvious, and only remaining source of information regarding the effectiveness of various aspects of hospital care is also the most neglected. The dearth of evaluative research in both physical and mental health areas is striking, but even more conspicuous is the lack of evaluative research which looks at the patients' perspective as a valid criterion of success. After reviewing the psychiatric and psychological literature (disciplines which one could reasonably expect to lead the way in understanding the importance of patient needs and expectations) Linn (1969) concludes "The patients themselves and the way in which they view their hospitalization have not been systematically studied". As a result, current theories of mental illness etiology, theories regarding the patient's goals and expectations of treatment, and treatment evaluations are designed by clinicians, for clinicians, and generally represent their point of view. For example, the research reported in "The Patient and the Mental Hospital" (Greenblatt, et al., 1957) consisting of over forty reports, contains no study focussing on the patient in the hospital setting. Many health professionals appear to have a basic distrust of the reports, feelings, and evaluations of patients, particularly mental patients.

Ellsworth (1975), in a review of "measures of treatment success", states that "patient's own reports . . . are the least costly to obtain, but probably are the least valid". (p.27). In spite of this assertion, he concludes the article by stating:

"In the final analysis, there is probably no one best treatment approach to any group of patients. In our efforts to discover whether one treatment is more effective than another, we have largely ignored the likelihood that the expectation, conviction, and motivation of those using and receiving various treatments are important determinants of success". (p.29)

This situation is even more pronounced in general hospital care. Mills (1974) found that "few reports solicit the views of patients or personnel in regard to specific nursing actions as they relate to a specific patient at a specific time". The irony here is that since the days of Florence Nightingale herself nursing literature has claimed a relationship between variables such as ward atmosphere, staff attitudes, psychosocial needs of patients, etc. and the effectiveness and efficiency of treatment. (Meyer, 1960; Burton, 1970; Schechter, 1966; Skipper and Leonard, 1965) Yet in most of these writings, environmental factors and nursing behaviors are controlled by the health professional and are, in a sense, imposed on the patient according to patient needs as perceived by the professional. Hedderson (1966) begins to support the importance of patient input into the planning and assessment of his own care with her conclusion that "A patient's view concerning what is important for his welfare influences his attitude toward his care as well as the value he derives from it". Abdellah and Levine (1958) state "if the patient feels that nursing service is inadequate, the totality of patient care is lessened". Furthermore, there are several indications that health professionals are beginning to take account of the way in which the patient views his health care (Mills, 1974). There is also evidence that trends toward increasing consumer involvement and participation in the health care delivery system combined with the fact that "many health professionals know through their own experiences that patients are not happy or satisfied with the care they receive or with the system of care" (Kramer, 1972) may have added impetus to these concerns.

The importance of giving credence to what the patient actually sees and feels (as distinct from the intent and behavior of the nurse or doctor) is also supported by the literature on perception. Klein (1970), for example, states that "purposes, aims and intentions suffuse the very act of perceiving". Knutson (1965) writes:

Current evidence suggests that perception is a learned, active, motivated process. What is perceived tends to be governed by personal interests, wants, concerns, anxieties, fears, hopes, and expectations. (p.161) Motivational, experiential, and other factors may influence the nature and quality of perception..(p.169).

Though perceptual errors (that is they are "errors" from the perspective of another observer) may be induced by "conditions of fatigue, illness, distraction, or excitement", the fact remains that "what he does not perceive does not exist for him insofar as he personally is concerned". (Knutson, 1965). From the vast amount of stimuli available to the hospitalized patient, he actively seeks out that information which meaningful to him and responds accordingly. After approximately three years of research in this field, Ware, et al (1975) state that "though patient perception measures may be unrelated to the actual technical quality of care received by patients, a validity analysis of the data suggests that quality of care perceptions, accurate or not, are important correlates of patient outcomes".

#### Statement of Purpose

In short, a key problem in modern health care develops as follows. The major patient demand on health professionals is for therapeutic comforting. Health professionals have little idea as to what specific behaviors stimulate patient progress toward cure. Consequently a great deal of time and energy is wasted on non-existent needs while other patient needs go unheeded. The somewhat obvious answer is to bring the patient and the health care system together in a co-operative effort. Such co-operation will likely result in increased patient satisfaction, shorter hospitalization periods and a far more economical health care delivery system.

Constructive strategies for change, however, must be preceded by reliable research into how the hospitalization process is presently being perceived by both the health care professional and the patient-consumer. It is to this end that this research hopes to make a significant contribution.

### A Review of the Literature

Suchman (1967) suggests that objectives may be trichotomized into immediate, intermediate, and ultimate goals. In general medicine, for example, an immediate goal in the case of an accident victim might be to assure that critical functions such as respiration or heartbeat are normal and, possibly, to set a broken limb. An intermediate goal might be a program of antibiotics to reduce risk of infection and close surveillance of input/output, laboratory results etc. The ultimate goal would be to discharge the patient in a relatively good state of repair if not completely cured. In psychiatry the immediate goal might be custodial in nature; the intermediate goal a course of chemotherapy; the ultimate goal a return to socially acceptable behaviour on the part of the patient.

The successful measurement of ultimate, intermediate or immediate goals depends upon the adequacy of the criteria used to determine the extent to which the goals have been attained. The criteria which are chosen by the investigator are determined by a variety of motives. For example, the criteria used in determining the success of an alcoholic treatment centre are different in a year in which the government forecasts budget cuts, than in a year in which government mounts a campaign to deal with alcoholism. Criteria are chosen on the basis of a combination of scientific, personal, political and economic factors or any of a host of other motives. It is important to note that criteria will be different at each level of evaluation, and relate to each other in terms of progression from immediate to ultimate.

Criteria may be better understood in terms of a classification proposed by Suchman (1967). These are: 1) effort, 2) performance, 3) adequacy of performance, 4) efficiency, and 5) process.

Evaluations which use effort as the criterion of success measure input without regard to output. If the input is of sufficient quantity and quality, success is claimed. For example, one criterion which may be used for evaluating the quality of care in hospitals is the nurse-patient ratio so that if the required number of nurses are on duty effectiveness is claimed. Performance is used as a criterion if the

study attempts to measure the results of the effort rather than the effort itself. In other words, it attempts to assess the amount of change in the problem being attacked. Adequacy of performance refers to the degree to which effective performance is equal to the total amount of need. The criterion of efficiency questions whether alternative approaches would accomplish the same thing more economically. The last category is process which involves gaining knowledge into the how and why of a particular operation. The selection of the criteria by which a program is to be judged is crucial to good evaluation research. The fact that this research is concerned with general staff/patient perceptions of hospitalization means that all five criteria categories must be given adequate attention.

Suchman (1967) identifies the three conditions which constitute acceptable evaluative research.

1. The existence of a presumption that a particular set of activities reduces the frequency of a specific group of morbidities.
2. The ability to provide the study population with the particular set of activities concerned.
3. The existence of techniques which will permit measuring changes in the frequency of morbidities affected by the activities in question. (p.74)

The first precondition requires the formulation of a hypothesis. In evaluative research the hypothesis is a statement of a causal relationship between, for example, some treatment, nursing approach or hospital environment and a desired effect. This is somewhat of a variation from non-evaluative research which is concerned with the relationship between two variables in a cause-effect sequence. The verification of the evaluative hypothesis requires the demonstration that the effect is more likely to occur in the presence of the particular treatment, care or milieu than in the absence of them.

The second of Suchman's (1967) preconditions simply requires that the subjects be exposed to the program that one is evaluating.

His third condition requires the availability of valid and reliable measurement techniques which are sensitive to the "effect" specified in the hypothesis.

There may be some question as to whether or not an evaluative study such as this one can overcome all of the problems inherent in its design, application, and interpretation. However, if the design of the study takes into account these pre-conditions and clearly specifies its criteria, it should yield meaningful results.

This researcher's primary concern deals with medical staff-patient interaction or, in other words, treatment. Treatment then, is simply another form of human interaction having a strong technical base or content. Treatment as an entity is obviously related to all three levels of objectives - immediate, intermediate and ultimate. It seems reasonable, however, to say that by far the majority of treatment time and energy falls into the intermediate range - that period of hospitalization between the initial phase of admission, testing and diagnosis and the final phase of assessment and discharge. Consequently, variables which relate to what might be called the routine of hospitalization seem to be the most relevant to the purpose of this study.

In this "routine" are two main categories of people, medical professionals and patients, who find themselves sharing a common environment and some sort of commitment to a common goal. A new system is thus formed, a health care delivery system, in which the hospital system itself and the patients' life system are integrated. The issue is not so much the objectives (treatment outcome) of this new system as it has been for some researchers (Gurel, 1964; Ellsworth, Maroney, Klett, Gordon and Gunn; Kahn and Weber, 1972), nor are we presently concerned with the adequacy of the resources available to this new system as was Ware in some aspects of his research (1973, 1974, 1975). We are concerned with the "process" of the new system, the role that each plays in the movement toward the goal - cure and discharge.

Rensis Likert (1961, 1967) in his organizational research has defined a continuum useful in identifying the process relationships between the components of a system. Basically his evaluative instruments involve a non-participative to participative continuum. This is divided into four systems of organization which Likert describes as; 1) Exploitive authoritative; 2) Benevolent authoritative; 3) Consultative; and 4) Participative group. The thrust of Likert's research regarding

organizational systems was that if the organization was managed via the Exploitive authoritative or Benevolent authoritative routes it would be characterized by low loyalty levels, lower performance, greater conflict and less co-operation, feelings of unreasonable pressure, less favorable attitudes toward superiors and higher costs. On the other hand, Consultative and Participative styles result in greater loyalty, higher performance, more co-operation, better attitudes, less costs, etc. (Likert, 1962, 1967).

There is no question that these latter results would be most welcomed by those concerned with health care delivery. Historically there has been a wide gap between patient and practitioner. Health care costs are rising rather incredibly. There are occasional inquiries into the performance levels of health care professionals. The question is; "Is a participative approach to treatment and/or hospitalization the most efficient and reliable route to effective and economical health care?" Other writers in organizational literature do not rule out Likert's concept but do offer other alternatives, the choice of which depends on the nature of the business, the people involved, etc. (Maier, 1973; Drucker, 1954; Bennis, 1963; Leavitt, 1964).

Simply put, sometimes participation is not the best route to efficiency. Indeed, in some isolated doctor-patient contexts such as surgery this would seem to be so. The important thing to note at the moment is that the degree of participation between medical staff and patient in treatment seems to be an underlying variable in a good deal of the health care literature.

Specifically, this research focuses on the interactions and perceptions of staff and active-care (as distinct from chronic-care) patients in general hospitals, who fall into the medical-surgical or non-specialty category of care. Given the narrowness of this interest, it is clear that this study will do little to counter Ware and Snyder's (1975) observation about current research on health care evaluation.

They state:

Although the general content of scales and questionnaires used to gather attitudinal data appears to be somewhat similar, the various dimensions studied and the methods employed are not standardized or even comparable across investigations. In part, noncomparability of focus and methods may result from the special needs of each study.

Because of this limitation and the fact that the literature in this field focuses on a great variety of patients, and health care contexts, the final selection of the variables was not insignificantly influenced by this researcher's professional experience as a consultant to a number of Ontario hospitals. Nevertheless, encouraged by an additional observation by Ware and Snyder (1975) that "the published uses of these data suggest that study goals are often more comparable than the variation in measurement techniques would suggest", a summary of the relevant research will be helpful at this point.

Published research which in some way took into account consumer perceptions and attitudes includes the evaluation of:

1) Various specific health care programs such as: student health services (Franklin and McLemore, 1967); health programs for women (Jolly et al, 1971); neighborhood health centres (Salber et al, 1972; Sparer and Johnson, 1971); day care for children requiring surgery (Shak et al, 1972); a mass tuberculin-testing program, (Shoenfield et al, 1963); and a "child-care-by-parent" program, (Lerner et al, 1972).

2) The performance of doctors in relationship to: common folklore about the "family doctor" (Cahal, 1962); their sensitivity to patient concerns (Hulka, 1971); patient ratings (Kisch and Reeder, 1969); their interaction with patients (Korsch, Gozzi and Francis, 1969); their authority over patients (Thrash, 1974); information exchange between doctor and nurse (Mauksch and Young, 1973); their changing attitude toward the public (Reinhardt and Gray, 1972); and their administrative status within the hospital and job satisfaction (Segal, 1969).

3) Attitudes toward health care by consumers who are not patients (Snyder and Ware, 1974; Ware et al, 1975).

4) Existing or anticipated health care needs in relationship to: the poor and the disadvantaged (Willie, 1972; Bellin and Geiger, 1972; Alpert et al, 1970); their implications for academic medicine (Ware et al, 1975).

5) The availability and utilization of health care facilities: generally (Aday, Andersen and Anderson, 1974); by various family members (Anderson, 1968); by families in a low income community (Bellin and Geiger, 1972); as related to ethnic and social psychological factors (Berkanovic and Reeder, 1973; Fabrega and Roberts, 1972); as related to geographical



factors (Brooks, 1973); in relation to government policies (Enterline et al, 1973); by people who seldom seek medical help (Kessel and Shephard, 1965); and government health care insurance (Newhouse, 1974; Olendzski, Grann and Goodrich, 1972).

The limitations of virtually all of the above mentioned research center around their approach to data analysis. The majority of studies to date have simply explored the "common sense" or "face validity" of the scale items measuring patient attitudes toward medical care services. Ware and Snyder (1975) criticize a good deal of this research by stating:

Empirical methods such as factor analysis have not, generally speaking, been employed to study the content characteristics of patient attitudinal measures now in use. Thus, not much is known about the extent to which measures hypothesized to reflect dimensions of patient attitudes toward medical care services are actually homogeneous and independent.

Far more sophisticated research has come from the evaluation of mental health programs. Generally, research into the attitudes and opinions of psychiatric patients toward hospitalization reveal complex relationships between treatment and outcome. Furthermore, the research suggests that the attitudes of mental patients are similar to those of non-patients and that actual hospitalization does not effect a radical change in attitudes (Rabkin, 1972).

Manis, Houts and Blake (1963), on the other hand, found that hospitalization is generally accompanied by a change in attitudes in the direction of staff attitudes. Further, they found that patients whose attitudes are strongly influenced by staff have a more favorable prognosis. What is not clear here is whether it was the nature of the staff attitudes which led to a favorable prognosis or the possibility that the more similar patient and staff attitudes are, the more favourable the prognosis.

Cohen and Struening (1962, 1964) developed a scale to measure opinions about mental illness. Five factors were identified as the main attitudes toward mental illness. The first factor, "authoritarianism" is held by those who view the mentally ill as an inferior class requiring coercive handling. The second factor, "benevolence", is held by those who maintain a paternalistic view toward patients. The next factor was titled "mental illness ideology". This approximates the medical model approach to mental illness, and is held by most mental health professionals. The fourth factor, "social restrictiveness", holds the mental patient to be a threat to society. The last factor, "interpersonal etiology", reflects the view of mental illness arising out of poor interpersonal experiences.

This scale was administered to 1304 patients in twelve hospitals and the factors were compared with effectiveness as indicated by time spent out of the hospital. The data shows that hospitals with high authoritarian-restrictive atmospheres are associated with fewer days spent by patients out in the community.

Mayo and HaveIock (1970) administered a questionnaire which included items from the California F Scale, the Custodial Mental Illness Ideology Scale, social distance measures, information content, acquiescence tendencies, and a nineteen-item semantic differential for the concepts "myself" and "mental patient", to 89 non-psychotic patients and 62 personnel. The results revealed authoritarianism to be the dominant factor for both patients and staff. Three other patient factors emerged. Factor two was a negative view of self, which involves the view of mental patients as bad. The third factor reflects an acceptance of mental illness based on social desirability. This involves a positive view of the mental patient, with similar ratings between "self" and mental patient. There were no significant demographic variables associated with the attitude factors.

Kahn and Weber (1972) found that patients with an authoritarian view of the hospital, those with a negative view of the hospital, and the more psychologically-minded tended to have a longer hospital stay. No other significant relationships emerged from the study.

A number of scales have been developed which attempt to measure the attitudes, feelings, perceptions of the hospital environment as perceived by the patient. The Ward Evaluation Scale (Rise, et al., 1963) attempts to measure degree of satisfaction with patient environment. The items provide measures of satisfaction with physical facilities, patient services, and patient management. The scale was administered to veterans in three hospitals, and was found to be sensitive to interhospital and interward differences. Patient variables of age, education, and length of stay appear to be independent of the WES scores. Klett, Berger, and Sewell (1964) administered the WES to 190 patients in eight wards of a state hospital. The scale again appeared to be sensitive to different ward environments. Sex and expected discharge date appear to be related

to the WES dimensions, but the authors note that female wards are often more attractive than male wards.

Only a few studies have attempted to relate treatment environment with treatment outcome. Gurel (1964) found the size of a hospital was related to patient length of stay, but not to effective symptom reduction. Ullman (1967) reported a study that corroborated this finding in a comparison of 30 Veterans Administration Hospitals. Ellsworth, Maroney, Klett, Gordon, & Gunn compared nineteen units in five hospitals using the Perception of Ward (POW) Scales. They found that efficient (high turnover) wards tended not to promote patient autonomy. It seems that these wards were run by professional staff who did not take the time to involve either patients or other staff in responsible roles, but focussed instead on admitting and discharging patients. Wards with low return rates were characterized as having motivated professional staff, and active participant roles for patients. Wards with the highest nursing staff ratios, also tend to have the poorest community tenure rates. The authors concluded that program dimensions associated with high community tenure rates were quite different from those related to high release rates. These results highlight the importance of specifying objectives and criteria in evaluative research. Ellsworth and Maroney (1972) administered the POW scales to 353 patients on three different ward programs. They obtained statistically significant, but low correlations with treatment outcome and factors related to staff receptivity. Patients preferred a traditional doctor-centered ward, rather than a patient-centered ward. The doctor-centered approach appeared to produce better posthospital adjustment than the patient-centered approach. This result is marked when particular patient sub-groups are compared. College educated and "angry" patients responded particularly well to the doctor-centered approach.

Moos, & Houts (1968) have developed a Ward Atmosphere Scale (WAS) which assesses a ward's psychosocial treatment environment as perceived by both patients and staff. The scale has been shown to differentiate between different inpatient wards, is related to objective ward characteristics such as size and staffing (Moos, 1971), and to general satisfaction and morale (Moos, 1970). The scale appears to be valid for British as well as North American wards (Moos, 1972). In comparing treatment environment to

treatment outcome, Moos and Schwartz (1972) found that wards with high dropout rates were perceived by patients as being low in emphasis on practical orientation, and program clarity, but high in anger, aggression, and staff control. Wards with high release rates were perceived by patients as high in practical orientation and staff control. Wards with high community tenure were perceived by patients to be high in staff control.

Spiegel and Younger (1972) developed the Ward Climate Inventory (WCI) which yields scores assessing the feelings of patients and staff about the social climate of the ward. Three areas of feelings are tapped: 1) Personnel concern for patients; 2) Patient concern for patients; 3) Ward morale. Higher elopement rates were associated with lower personnel concern for patients, and with discrepancies between patient and staff perceptions on personnel concern and ward morale.


As has already been stated, very little comparable research has been done in regard to medical patient perceptions. Again, the lack of statistical sophistication in many of the studies that are available raises some questions regarding the generalization of their results.

White (1972) in comparing the rankings, as to importance, of fifty selected nursing activities by 300 hospitalized adults and one hundred professional nurses found that:

The study revealed that patients were more concerned than nurses in physical care; nurses had greater concern than patients for satisfying psychological aspects of care; both nurses and patients highly agreed on the importance for the nurse to carry out the doctor's orders; and both test groups found preparation for discharge of relatively little importance.

Dominiak (1969) in studying the attitudes of 74 male patients admitted to a coronary care unit with their first myocardial infarction found a frequent occurrence of dependency feelings even after transfer to a general care unit and after discharge. As a remedy for this the author recommended a "weaning process" for critically ill patients.

Dodge (1972) in looking at the issue of patient awareness administered a sixty-item questionnaire to 139 medical-surgical patients and 66 nursing staff. Results indicate that patients want specific information about their condition, while nurses think it is more important for them to know what to expect of care.



For the patients in this study, findings suggest that the most important ambiguities to clarify were those related to their current and expected physical states.

Nurses....saw expectancies of care as more important than details of seriousness and cause of their conditions.

McGhee (1961) in a study of patient attitudes toward nursing care found that there was a strong demand from patients "for more information about day to day treatment and progress". An investigation of doctor-patient communication by Francis, Korsch and Morris (1969) involving parent visits to a children's hospital concluded that "mothers who expected to learn the causation and nature of their child's illness and failed to do so were less likely to be satisfied than any other group of patients". Much the same results were reported by Bergman (1969) who found that less than five percent of the post-hospitalized patients reported having received specific instruction for their care. Somewhat ironically, only thirteen percent said it would have been helpful if they had.

In a well-designed piece of research, Barrell and Cummings (1966) studied 517 male medical patients and found that feelings of comfort with the hospitalization experience were greater for older patients; patients who prefer an authoritarian approach by the staff; and patients with lower characteristic trait anxiety. These three variables were essentially independent predictors. Medical status, either current or expected future, as judged by the patients' physician, was not significantly related to emotional response to hospitalization when age was held constant.

Patient perceptions of outpatient medical care were studied by Fisher (1971) who found that satisfaction was influenced by the personal interest shown in the patients; how much patients felt they had improved; and how adequately they felt their condition had been explained. Fisher (1971) also concluded that "past experience with illness and with physicians also appears to be related to patient's satisfaction with medical care".

Other studies show that patient satisfaction increases with their contact time with physicians and nurses (Fisher, 1971; Abdellah and Levine, 1958); and that the most desirable qualities for nurses as far as the patients are concerned are interest, knowledge and personalized

service (Tagleacozzo, 1965; Mills, 1974).

By far the most extensive research on patient perceptions has been done by Ware and his associates at the School of Medicine, Southern Illinois University. (Ware, Snyder and Wright, 1973; Ware, Snyder, McClure and Jarrett, 1973; Snyder and Ware, 1974; Chu, Ware and Wright, 1973; Ware, Wright, Snyder and Chu, 1975; Ware and Snyder, 1975; Ware, Miller and Snyder, 1973.) Though their investigations involved various types of non-hospitalized consumers and focused on general consumer attitudes, health values, perceived health and satisfaction as a function of the recipient, the validated dimensions of patient perception were consistent.

The main body of their research contributed to the development of the Patient Satisfaction Scale (Chu, Ware and Wright, 1973; Ware Snyder and Wright, 1973; Ware, Snyder, McClure and Jarrett, 1973; Ware and Snyder, 1975). Seventy scale items were grouped according to the 22 specific characteristics of doctors and medical care services they were hypothesized to measure.

The twenty-two groupings (each of which consisted of two to four test items) were then further assigned to general variables of patient satisfaction on the basis of a factor analytic study of measures of patient perceptions by Ware, Snyder and Wright (1973). These six general variables were 1) Access/Convenience; 2) Availability; 3) Continuity of Care; 4) Financial; 5) Humanness; and 6) Perceived Quality.

The authors regarded as validated dimensions those which satisfied criteria described by Comrey (1961, 1967). Comrey's concept of a Factored Homogeneous Item Dimension (FHID) is defined as "a group of scale items having similar factor content which have been developed according to logical and statistical criteria" (Ware and Snyder, 1975).

Though Ware and Snyder (1975) caution against premature generalization, their factor analytic study of measures of patient attitudes regarding characteristics of doctors and medical services identified four common attitudinal dimensions which accounted for seventy-two percent of the reliable variance in index scores. These were: 1) Physician Conduct; 2) Availability of care; 3) Continuity/Convenience of care; 4) Access Mechanisms (such as financial considerations and access to emergency care).

The physician conduct dimension, containing measures of consumer attitudes toward the doctor's thoroughness, information-giving, etc., suggests that "consumers of medical care services may have one general attitude toward their doctors". In other words the consumer does not distinguish between "curing" and "caring" behaviors as suggested in much of the literature. This lack of distinction between the technological and human aspects of care has also been noted by Aday, Anderson and Anderson (1974) and Zyzanski, Hulka and Cassel (1974).

The availability of care dimension pertains to the ease of access to hospitalization, being able to find a family doctor or a specialist, etc.

Continuity and convenience of care focused on how easy it is to get to one's doctor, whether or not one was seen by the same doctor at each office visit, etc.

The fourth dimension, access mechanisms, pertained primarily to economic access to health care services - that one's income to a great extent determined the quality and availability of satisfactory health care.

Both of these latter dimensions were of relatively little importance to this present research. Because of the fact that subjects involved in this research were actually hospitalized, the "convenience of care" dimension was irrelevant. As well, the "access mechanisms" dimension identified by Ware become irrelevant in light of the government-paid medical services in Canada.

#### Variables Selected For This Study

From this research seven dependent variables were selected which could be arranged in a fashion corresponding to Likert's (1967) Authoritative, Benevolent, Consultative and Participative dimensions.

These were: 1) Humanness of Staff which was designed to focus on both nurse's and doctor's concern, warmth and friendliness, supportive behaviors, availability to patients, and respect for patient's privacy. This humanness factor was consistently identified in virtually all of

the literature mentioned previously. However, a couple of the specific items do deserve further comment. The availability of medical staff was a factor identified most clearly in Ware's research. His focus, however, was on availability within the community while this present research considered the availability of staff within the hospital. The respect for privacy item was included as part of the humanness dimension to see if patients felt constantly supervised or if they felt able to have time to care for themselves.

2) Patient Awareness/Information Giving was structured to identify the degree to which patients had information about their condition, treatment, etc., via communication from staff.

3) Patient Input Into Nursing Process focused on the patient's perception of the validity of his contribution or potential contribution to treatment planning and process. In other words, does the patient think he should have anything to say about the type and quality of his care.

4) Patient Perception of Professional Competency was designed to examine the basis for the patient's view of staff competency. Is there enough involvement between physician/nurses and patient for the patient to have a "feel" for their ability?

5) Patient Perception of Inter-Staff Relations was concerned with whether or not patients perceive co-operation or lack of co-operation among nurses and between doctors and nurses.

6) General Patient Impressions of Hospital Organization centered on general perceptions of the hospital, attitudes of staff, and treatment of visitors. The question here really deals with the degree to which patients are assimilated into the hospital system and thus have an intimate knowledge of the system.

7) Daily Living Activities was included on the basis of some research by Hauck (1971) and informal and unpublished experiments presently being conducted in some hospitals indicating that a work component in treatment has enormous therapeutic potential. Work in the context of a general hospital may include activities such as cleaning the room, making one's own bed, and picking up one's own food trays.



### Methodology

The main research effort was preceded by a trial phase which involved only the testing of patients. No trial was conducted with staff since the researcher hoped to conduct the main part of the research in the same hospital and wanted to avoid the methodological and practical problems of re-testing staff. Sufficient time was to be allowed for patient turn-over between the trial and main phases of the research.

An initial trial questionnaire was distributed to 78 medical-surgical patients in an average size (400 bed) city hospital. At the request of the Nursing Administration, responsibility for the distribution and collection of the questionnaires was left up to the Head Nurse on each unit involved. The Head Nurses were given a brief introduction to the project at a Head Nurse meeting and were told that the only restrictions as to the patients selected were that they have a medical or surgical diagnosis (as compared to psychiatric, for example) and that they would have been in the hospital at least two days at the time they completed the questionnaire. The latter criteria was intended to allow the subject to become familiar with the hospital environment and routine.

A 34-item questionnaire was designed for patients with each of the seven variables previously described being made up of several items as follows:

#### 1. Humanness of Staff

- a) Nurse's Concern.
- b) Nurse's warmth and friendliness.
- c) Nurse's support, reassurance and encouragement.
- d) Nurse's availability to patients.
- e) Nurse's respect for patient's privacy.
- f) Doctor's concern.
- g) Doctor's warmth and friendliness.
- h) Doctor's support, reassurance and encouragement.
- i) Doctor's availability to patients.
- j) Doctor's respect for patient's privacy.

#### 2. Patient Awareness/Information Giving

- a) Amount of information received from Doctor.

- b) Expectations regarding treatment.
- c) Knowledge regarding reasons for tests.
- d) Knowledge regarding effects of medication.

3. Patient Input Into Nursing Process

- a) Information from the patient.
- b) Patient credibility regarding reports of physical condition.
- c) Patient credibility regarding reports of effects of medication.
- d) Patient's reports about pain.
- e) Patient's input regarding discharge date.
- f) Medical staff-patient communication.

4. Patient Perception of Professional Competency

- a) Doctor's competency.
- b) Nurse's competency.
- c) Patient's perception of doctor's attempts to stay current in medical knowledge.
- d) Patient's perception of needing a Specialist.

5. Patient Perception of Inter-Staff Relations

- a) Nurse-doctor communication.
- b) Doctor's knowledge of patient progress.
- c) Doctor-nurse co-operation.
- d) Nurse's friendliness and co-operation.

6. General Patient Impressions of Hospital Organization

- a) General hospital organization.
- b) General staff attitude
- c) Staff response to visitors.

7. Daily Living Activities

- a) Responsibility for making beds.
- b) Responsibility for room cleanliness and orderliness.
- c) Responsibility for food delivery.

The questionnaire was patterned after the Likert four-system model. Each item was described by four different statements which ranged from being authoritative in tendency to participative. For example, the item regarding the doctor's availability to patients appeared as follows in the questionnaire.

Doctors seldom seem to have any time to spend with their patients.	Sometimes doctors will try to find some time to spend with their patients.	Usually doctors will try to spend some time with their patients.	Doctors always seem to find time to spend with their patients.
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Respondents simply indicated their thoughts by marking an "X" at some point on the scale. For purpose of scoring, the continuum was divided into 20 spaces, 1 being at the authoritative end of the continuum and 20 being at the participative end.

The items in the questionnaire were arranged in random order. Also, half of the items were randomly selected to be printed in a reverse order from the others to avoid response set.

The questionnaire also included an information sheet which asked for: age; sex; marital status; expected length of stay in the hospital; length of stay in hospital to date; outside activities (occupation, etc.); and a description as to why the respondent was admitted to the hospital.

An instruction sheet which simply explained that the questionnaire was part of a research study to examine how both patients and hospital staff view hospitalization was also attached. Patients were reminded that the questionnaires would be anonymously written and were encouraged to answer honestly. An example of how to fill in the questionnaire was included.

### Results of the Trial Phase

A principal components analysis performed on the 34 questionnaire items showed, after extraction of components with eigenvalues greater than 1.00 and rotation to the varimax criterion, only four factors which were labelled as: 1) Involvement/Integration (of doctors, nurses and patients); 2) Nursing Contact/Competency; 3) Doctor's Contact/Competency; and 4) Staff Relationships/Working Climate. Loadings close to or above the .45 level was considered the criteria for the distribution of items among the factors.

The largest factor, Involvement/Integration, included nine items which seemed to inter-relate best as follows:

If doctors and nurses work well together, nurses will have more information as to why the doctor is ordering certain treatments since this information is more likely to be given to the nurse by the doctor. This teamwork results in a tendency to also involve the patient in terms of his/her knowing why certain tests, etc., are being ordered and in terms of the staff seeking and valuing the patient's own perceptions of his condition. The patient's ability to clearly report on his pain, etc., is increased since he has a greater knowledge of what is being done to him.

Such involvement in the hospitalization process not only results in doctors seeming more "up-to-date" in their knowledge of medicine (probably due to the fact that the nurses speak more highly of them to the patients), but also in the patient seeing the whole hospital as an efficient, well-organized place.

Wanting to be an even more integral part of this well-organized team, patients tend to be willing to help by picking up their food trays, and being partly responsible for the cleanliness of their room.

Factor II, Nursing Contact/Competency, contained six items which logically fit together as follows:

As nurses spend more and more time with their patients, they are increasingly seen as warm and friendly people. This sort of relationship encourages patient-nurse communication resulting in the nurse having more complete information about the patient's condition which she is then able to record and/or communicate to the doctor.

Another benefit of this communication is that the nurse is able to ensure that the patient fully understands what is being done for him/her. Interaction of this sort also reassures the patient that the nurse does indeed know what she is doing. The doctor, who then has more confidence in the accuracy and completeness of the nurse's reports, has

a lower tendency to invade the patient's privacy in order to get more detailed information about their condition

The six items which make up the Doctor's Contact/Competency factor indicate that:

Doctors who have a personal concern for their patients tend to provide those patients with more information about their condition and are willing to take whatever time is required to do so. In this type of relationship the patient develops greater trust in the doctor's ability since the doctor seems to be able to give the reasoning behind his decisions.

Because the doctor has fully informed the patient about his condition and what is expected of him/her, nursing staff have less need to be constantly supervising the patient's activities, thus providing the patient with needed privacy.

Finally, factor IV, labelled Staff Relationships/Working Climate, included six items which can reasonably be read as follows:

When nurses spend sufficient time with patients and patients perceive them as being warm and friendly, this perception is generalized by the patient so that all of the staff in the hospital are seen as enjoying their work. This atmosphere of friendliness and co-operation is also reflected in the patient's attitude toward the doctor who is then seen by the patient as a source of encouragement and reassurance.

Seven items did not relate to any of the four factors. Among these were questions regarding the treatment of visitors to the hospital; the credibility of patient reports about the effect of his medication; the patient's understanding as to the effects of his medication; the degree to which patients like to talk to doctors and nurses about how they are doing; whether or not the patient is consulted about the use of specialists; the patient's involvement in discharge planning and the seriousness with which hospital staff regard the patient's reports about how he is feeling.

#### Discussion of the Trial Phase

From the analysis it seemed that the patients generally did not differentiate between different aspects of their hospital experience as specifically as expected. For example the patient's feeling of involvement (Factor I) included his own sense of credibility as well

as his attitude toward his physical environment. On the other hand, some distinctions were made that were not predicted. It was thought that patients would regard all hospital staff (including doctors and nurses) in a similar way but would make distinction between caring (warmth, contact, etc.) and curing (professional competence) activities. In fact exactly the opposite happened and, very clearly, attitudes towards nurses and attitudes towards doctors proved to be separate entities. As well, patients seemed to make little distinction between the psychological and technical roles of the professional.

Further it was noted that the majority of responses to the items, as indicated by their means, placed the patients' perceptions on the border between what would compare to Likert's System III (consultative) and System IV (participative) categories. (See Table I). The items which resulted in clearly lower means, however, were those in which a patient was being asked to "do" something such as pick up his own food tray or in which the patient was asked to help make a decision such as whether or not a specialist should be called in. In other words, participation is clearly preferred to non-participation provided no responsibility is attached.

#### Phase II Method

In revising the questionnaire those items which did not relate to any of the four factors identified, or those in which the intent lent itself to be included in other items, were discarded. For example, the two questions asking the patient how much information he had about his treatments and his medication were combined into one item.

To the nine items included in the Involvement/Integration factor was added a tenth item designed to more clearly identify the factor. This item questioned the degree to which respondents saw medical staff and patients working together as a team.

The Nursing Contact/Competency factor was also given an additional factor, however, it was included only on the staff questionnaire. This item focused on whether or not nursing staff

TABLE 1

Mean patient responses to trial questionnaire items

ITEM	MEAN	ITEM	MEAN
1. Staff treatment of visitors	13.6	18. Nurses recognizing pt. need for privacy	15.3
2. Patients making own beds	5.4	19. Drs. info re patients condition	14.4
3. Credibility of pt. reports re affect of meds.	15.4	20. Staff enjoyment of work	15.4
4. Pt. understanding re effect of meds.	14.3	21. Drs. encouragement/reassurance	15.4
5. Nurses knowing what they are doing	16.7	22. Pt. expectations re treatment	13.8
6. Pts. talking to Drs. & RNs re progress	14.1	23. Nurses encouragement/reassurance	15.0
7. Contact time with nurses	14.4	24. Pt. involved in discharge planning	11.6
8. Information from Dr. re condition	14.3	25. Personal concern shown by Doctor	14.5
9. Friendliness and co-operation among nurses	16.5	26. Pt. involvement in treatment plan	10.2
10. Drs. warmth and friendliness	14.6	27. Responsibility for room cleanliness	9.1
11. Nurses warmth and friendliness	16.1	28. Staff belief of pt. reports re pain.	17.1
12. Pt. involvement in choosing specialist	11.4	29. RN knowing why Drs. order treatment	15.6
13. Drs. respect for pts. privacy	16.5	30. Pt. information re tests	14.7
14. Drs. knowing what they are doing	15.5	31. Dr. up-to-date re medicine	15.4
15. Credibility of pt. reports re pain	14.9	32. Drs. and RNs working together	16.8
16. Nurses personal concern for patients	15.1	33. Patients picking up food trays	5.1
17. Contact time with doctor	12.9	34. General hospital organization	16.9

thought doctors were satisfied with the information given to them about their patients. Nursing Contact/Competency, then, was made up of the original six items on the patient questionnaire and seven items on the staff questionnaire.

Doctor's Contact/Competency, the third factor, also received an additional item on the staff questionnaire. Added was an item questioning the degree to which staff saw patients being informed by their doctor about what they had to do to get better.

Finally, the six items relating to the fourth factor, Staff Relationships/Working Climate, were left unaltered. However, since an attempt was being made in this research to identify a relationship between patient/staff attitudes and the style of management in the hospital (as identified by Likert's "Profile of Organizational Characteristics" questionnaire), four items corresponding to Likert's four systems were also included on both questionnaires. The four items questioned whether staff at the hospital do things just because of what might happen to them if they don't (Authoritative or System I); or just because they feel that those in charge know what's best (Benevolent dictatorship or System II); whether those in charge always run things by asking for staff opinions and then making up their own minds as to what's to be done (Consultative or System III); or whether medical staff and patients always work together as a team (Participative or System IV). This latter item was also regarded as part of the Involvement/Integration factor described previously.

A specific measure of Satisfaction was also attempted, bringing to five the number of dimensions included in the questionnaire itself. Four aspects of satisfaction were included, namely: patient's own satisfaction; patient perception of staff satisfaction; staff's own satisfaction; and staff perception of patient satisfaction. The items were also constructed to accomodate the findings of Herzburg (1959, 1961) and Bradburn (1965) that satisfaction is not simply the absence of dissatisfaction. Accordingly, the degree of dissatisfaction and the degree of satisfaction were measured by separate items.



In total the number of items in the questionnaire relating to hospital experience numbered 36 for the patients and 37 for the staff.

The two questionnaires also differed in their frame of reference. For example, if the patient questionnaire read, "My doctor doesn't give me any information.", the staff version read, "Doctors don't give their patients any information."

Because the concept of participation was so basic to this research, the author was interested in whether or not there was a relationship between staff-patient participation levels and the level of participation within the rest of the organization. Likert's "Profile of Organizational Characteristics, Form S" (1967) was also distributed to the staff involved. This particular form contains items related to Leadership, Motivation, Communication, Decisions, Goals, and Controls. Staff respondents were asked to complete the Likert form twice, once as they view their hospital now and secondly as they would like to see their hospital.

The instruction sheet attached to the questionnaire was left unaltered since only a very few patients completed the questionnaire incorrectly during the trial phase.

The general information sheet, however, did require some simplification. The question regarding occupation was dropped since few patients responded to it. For the same reason and because what responses there were could not be practically scored, the inquiry about why the patient was admitted was dropped. In its place patients were asked to indicate if they considered their condition to be not "very serious", "serious" or "very serious".

The information sheet attached to the staff questionnaire asked for age; sex; marital status; position (administration, head nurse, or staff nurse); education; how long working in this hospital; how long working on the particular unit; whether they were full or part time employees; and the type of unit they worked in. Education and tenure were of particular interest since Rice et.al. (1963) and Klett, Berger and Sewell (1964) found these to be responsible for some

variance on scores obtained on the Ward Evaluation Scale. Though their subjects were patients it was expected that this test of staff members would produce a similar effect.

In order to study the effects of different degrees of participation between patients and staff, it was necessary to identify hospitals that might reasonably have differing levels of participation. Therefore, the dependent variables chosen were north and south, and large and small.

Barker's (1960, 1965) view of psychological ecology is helpful here. In examining various "behavior settings" (including not only the human component but also a variety of other objects such as physical plant, equipment, supplies, etc.), Barker (1966) found that the setting can effect change in the behavior of individuals who enter them. He found, for example, an underpopulated setting, such as northern Ontario is, results in people producing greater effort, taking on a greater variety of roles, being less sensitive to differences among people, having a higher regard for the other, and having a greater expectation of performance. Overpopulated settings, such as in southern Ontario cities, produce the opposite consequences. (Sampson, 1971).

The validity of expecting differences between large and small hospitals is also supported by Barker's research (Barker and Gump, 1964; Barker, 1965). In studying large and small schools Barker found that the small school increased satisfaction which was related to: "a) the development of competence; b) being challenged; c) engaging in important actions; d) being involved in group activities; e) being valued; f) gaining moral and cultural values". (Barker, 1965, p.11) There was, in other words, group pressure to participate in the smaller setting.

Much the same conclusions are supported by several hospital researchers. Alutto and Belasco (1974), for example, found that the conditions of professional practise appear most likely to influence the level of attitudinal militancy among staff. Teulings, Jansen

and Verhoeven (1973) concluded that larger hospitals:

- a) are less attractive places to work, and diminish the attraction of the nurse's profession and the nurse's work content (perceived by the nurse's population in general);
- b) have a less satisfying work climate;
- c) take less care of the patient as a human being. (p.501)

Contact was made with four general hospitals in Ontario; a relatively large hospital (250-350 beds) and a small hospital (100-200 beds) in northern Ontario, and two comparative hospitals in southern Ontario. As will be discussed later, however, persistent complications arose when attempts were made to obtain the necessary permission for the research. Consequently, the research was limited to two hospitals in Southwestern Ontario of approximately the same size (250-350 beds). The hospital used in the trial phase was not included due to scheduling difficulties at the hospital. Hospital I is strictly a general hospital operated by a religious organization. Hospital II consists of two major units, one of which is a geriatric facility. The main unit, in addition to the general medicine component, also has large and well-known psychiatric and psychological facilities. No respondents were drawn from these specialty areas.

Questionnaires were distributed to 68 patients and 55 staff members at Hospital I and to 55 patients and 60 staff members at Hospital II. In both cases a general introduction to this project was made at head nurse meetings by the researcher. Again hospital policies required hospital staff members to select the patients to be tested and to distribute the questionnaires. The same selection criteria used in the trial phase was employed. Respondents remained anonymous and the completed forms were collected by members of the hospital staff. Though not part of the design, it was learned that those responsible for the distribution and collection of questionnaires in Hospital II, provided plain envelopes in which respondents could seal their questionnaires. This was done, of course, to ensure the anonymity that the researcher had asked for. So to a slight degree Hospital II responses could be considered more anonymous than those

from Hospital I. Using this fact for interpretive purposes should be done with caution, since the envelopes did not guarantee that the completed forms would not be identified or read by hospital personnel.

Separate principal component analyses were conducted for patients and staff. For purposes of comparing factor patterns, patient and staff responses were analyzed together. To establish differences between hospitals and patients and staff, appropriate multivariate analysis on both factor scores and individual item responses were performed.

### Hypothesis

Within hospitals it was generally expected that:

- 1) The more that the treatment approach tended toward a participative system, the greater would be the level of both patient and staff satisfaction.
- 2) Patients would tend to perceive a more participative approach to hospitalization and staff would perceive a more traditional medical model of non-participation.
- 3) Patients would likely evidence more similarity to staff attitudes as the length of stay in the hospital increased.
- 4) No difference between hospitals was expected.
- 5) A high level of congruence was expected regarding the relationship between "now" scores received on the Likert form and the staff perception of treatment. In other words, if the organization was seen as non-participative so would be the approach to treatment.

## Results

It was clear from the review of the literature that there are few serious studies regarding the hospitalization experience, particularly from the viewpoint of the patient. This may be reflective of a conflict between the health care practitioner and the behavioural scientist. The scientist scorns the casual Readers Digest's "My Favourite Patient" approach found so frequently in nursing literature. On the other hand the practitioner views the scientists' analysis of variance tables and his constant reference to subjects as cold, unfeeling and impractical. Hopefully, the recording of the statistical results and subsequent discussion of this research will fall prey to neither tendency.

A consideration of the demographic data is necessary at the outset since some of the differences found between the two hospitals and between patients and staff may, in part, prove to be attributable to demographic dimensions.

The average ages of staff and patients indicated one rather obvious difference between the two groups (see Table 2). As can be noted, the staff respondents at an average age of 29.4 years were considerably younger than the patient respondents at 46.6 years of age. It seems reasonable, therefore that the age factor may have had some effect on the way these respective groups perceived the hospital environment.

The male/female factor should also be kept in mind. As one would expect, the staff were predominantly female (99.1%) with only 1 male among the 115 staff respondents (See Table 3). Patients, on the other hand, were made up of 69.9% females, having 30.1% or 37 males.

The third demographic dimension recorded for both groups was in regard to marital status (See Table 4). It was not surprising to note a greater percentage of divorced and widowed people within the patient group given the fact that they were considerably older. 10.6% of the patients were divorced compared to 6.1% of the staff, while

TABLE 2

Average age of subjects by hospital and status

	Patients	Staff	Combined
Hospital I	47.0%	31%	39.8%
Hospital II	46.1	27.9	36.6
Combined	46.6	29.4	

TABLE 3

The percent of female subjects by hospital and by status

	Patients	Staff	Combined
Hospital I	76.5%(52)	100%(55)	87.0% (107)
Hospital II	61.8 (34)	98.3(59)	80.9 (93)
Combined	69.9 (86)	99.1(114)	

TABLE 4

The percent of subjects who were married, single, divorced or widowed  
by hospital and by status

	Patients				Staff			
	M	S	D	W	M	S	D	W
Hospital I	58.8% (40)	19.1% (13)	5.9% (4)	16.7% (11)	56% (31)	27.3% (15)	10.9% (6)	5.5% (3)
Hospital II	56.4 (31)	10.9 (6)	16.4 (9)	16.4 (9)	68.3 (41)	30.0 (18)	1.7 (1)	0.0 (0)
Combined	57.7 (71)	15.4 (19)	10.6 (13)	16.3 (20)	62.6 (72)	28.7 (33)	6.1 (7)	2.6 (3)

16.3 % of the patients were widowed compared to 2.6% of the staff. The percentages between hospitals seem generally comparable though it is interesting to note that the percentage of divorced subjects in Hospital I stood at 10.9% compared to 1.7% in Hospital II.

Other information asked for from the staff respondents included their position, amount of education, the amount of time they had worked in that particular hospital and in that particular unit, and for the type of unit on which they were presently working. This data has been summarized in Table 5. In terms of position or rank within the hospital hierarchy, respondents were distributed in generally the same ratio in both hospitals. The "Nursing Office" category referred to someone in administration such as a Supervisor, Director of Nursing, etc. A "Head Nurse" was regarded as one who was in charge of a definable unit within the hospital. These made up 10.4% of staff respondents. "Staff Nurse" referred to any other nursing personnel be they a Registered Nursing Assistant (R.N.A.) or a Registered Nurse (R.N.). This was the largest group making up 89.6% of the total.

Likewise there was little to distinguish the two hospitals when comparing the education of their respective respondents. The four categories were weighted according to the number of years of formal training required for each level. Thus the range went from one year for an R.N.A. to two years for an R.N., to a minimum of four years for a baccalaureate (including, or in addition to, a nursing degree).

There is a notable difference in the working tenure noted by the respondents. Hospital I respondents had been working in that hospital an average of 61.6 months or just over five years. They had, however, only worked on their present unit an average of 36.5 months. This would suggest that they had changed units at least once in their five-year employment. Hospital II, on the other hand, had an average employment of 46.5 months, with the average tenure on a particular unit being 40.6 months. Quite clearly then, Hospital II staff tended toward more or less permanent appointments - at least in comparison to Hospital I. This observation may be pertinent to the upcoming discussion on the nature of the hospital care as perceived within each



TABLE 5

The distribution of staff respondents by hospitals according to their position, education, time worked in hospital, time worked in unit, and type of unit

	Hospital I	Hospital II	Combined
<u>Position</u>			
Nursing Office	0 %	0 %	0 %
Head Nurse	12.7	8.3	10.4
Staff Nurse	<u>87.3</u>	<u>91.7</u>	<u>89.6</u>
	100% (55)	100% (60)	100% (115)
<u>Education</u>			
R.N.A.	34.5%	43.3%	39.1%
R.N.	61.8	51.7	56.5
Bachelor's Degree	3.6	5.0	4.3
Master's Degree	<u>0</u>	<u>0</u>	<u>0</u>
	100% (55)	100% (60)	100% (115)
<u>Average Time in</u>			
Hospital in Months	61.6	46.5	53.7
<u>Average Time in</u>			
Unit in Months	36.5	40.6	38.7
<u>Type of Unit</u>			
Med/Surg	70.9%	70.0%	70.4%
Geriatric	3.6	0	1.7
All Female	16.4	6.7	11.3
All Male	0	0	0
Adolescent	9.1	0	4.3
Neuro-surgery	0	8.3	4.3
Cardio-vascular	<u>0</u>	<u>15.0</u>	<u>7.8</u>
	100% (55)	100% (60)	100% (115)

hospital.

Responses to the "Type of Unit" did not seem to be of much consequence and this, in fact, was borne out by further analysis. Part of the difficulty lay in the fact that, in a general sense, all of the unit categories noted in Table 5 can be classified as "Medical-Surgical". In other words it is likely that some respondents identified their unit as "Medical-Surgical" rather than as "All Female", "All Male", etc. More careful wording of the item may have been helpful.

Information items peculiar to the patient questionnaire included the amount of time they expected to be in the hospital and the amount of time they had been hospitalized at the time of completing the questionnaire. How serious they considered their condition to be was also asked. The responses are recorded in Tables 6 and 7 respectively.

In both hospitals patient respondents had been in the hospital over nine days on the average, adding some assurance that the attempt to ensure that those selected as subjects had had sufficient exposure to the hospital environment had been successful. There was a tendency for medical-surgical patients admitted to Hospital II to expect to stay slightly longer than those admitted to Hospital I. The difference was minimal, however, and other analysis gave no cause to examine this tendency further.

The perceived conditions of both groups of patients was quite comparable. Overall, the largest group of patients (48%) considered themselves to be seriously ill while 42% considered their condition to be not very serious. Those thinking themselves to be very seriously ill made up 7.3% of the total.

A principal component analysis, performed on all groups together and on patient and staff responses separately, yielded, after extraction of factors with eigenvalues greater than .1.00 and varimax rotation, ten patient factors, twelve staff factors and nine overall factors. The overall factors were, generally, most comparable to the patient factors with the first three factors being particularly common to

TABLE 6

The number of days patients expected to be in the hospital  
and the number of days hospitalized to date by hospitals

	Hospital I	Hospital II	Combined
Expected Stay	12.9	14.2	13.5
Days Hospitalized	9.3	9.6	9.4

TABLE 7

The percent of patients who perceive themselves  
to be in each of three conditions;  
not seriously, seriously, or very seriously ill, by hospital

Condition	Hospital I	Hospital II	Combined
Not serious	39.7%	45.5%	42.3%
Serious	48.5	47.3	48.0
Very serious	8.8	5.5	7.3
No response	2.9	1.8	2.4
	100% (68)	100% (55)	100% (123)

both patients and staff. The item groupings and their respective loading have been noted in Table 8.

The main factor, Factor I, Support/Competency, contained nine items which loaded exclusively on this factor, again using the criteria that items have a weight of .45 or greater and that a two-point difference exists between the loading on Factor I and the next heaviest loading. The items referred to either competency, evident in items such as "nurses knowing what they are doing" and "hospital seeming well organized", or to psychologically supportive issues such as "feeling of co-operation among the staff", the "nurses warmth and friendliness toward patients", "medical staff and patients working as a team", etc. This factor corresponded very closely to the first factor found in the trial phase of the research. Basically, it was clear that the more psychological support and co-operation existed between doctors, nurses and patients, the more enjoyment and satisfaction was derived by the staff from their work and the more the patient perceived the staff as being competent, the hospital as being a well organized, efficient place and the quality of care as being satisfactory. This was much in keeping with the findings of Fisher (1971) and Abdellah and Levine (1958) discussed earlier. It was also interesting and important to note the very obvious patient influence in establishing this factor. The support/competency issue was the primary factor from the patient's perspective while it proved to be only the sixth factor for the staff.

"Doctor/Patient Relations", the second overall factor, was perhaps the most comparable between the overall, patient and staff groupings. The trial phase results had also shown it to be a very distinguishable variable. As one would expect, the doctor's role played a large part in affecting both the staff and the patient perception of the hospitalization experience. This involved the amount of time spent with the patient, the amount of information given to the patient and the doctor's general attitude toward the patient.

TABLE 8

SYSTEM LOADINGS

The third factor was labelled "Patient Tasks" and included the two "work" items of patient picking up their own food trays and making their own beds. A slight, but interesting interaction effect was found here (see Table 10), which will be discussed subsequently. Factor III, then, centered on the degree to which patients were willing to perform routine chores in the hospital and the degree to which staff were prepared to let them.

One of the most frequently heard concerns expressed by those responsible for supervising nursing care is that the patient is frequently left ignorant about what is being done to him/her and why it is being done. Factor IV, named "Technical Communication" would seem to validate that concern. The amount of information being transferred from doctor to nurse to patient was an important variable in how both staff and patients viewed the hospitalization process. As noted previously, Dodge (1972) McGhee (1961) and Francis, Korsch and Morris (1969) identified much the same factor. The latter authors, however, linked the lack of information with "less satisfaction" in regard to care. No satisfaction items were found to be related to this factor in this study though patients did tend to link the availability of information to doctor and nurse teamwork.

A small factor, "Responsibility for Environment", was made up of one item (27) which had an acceptable loading (.56) only on the overall Factor V. One would expect this "work" item to show a fairly strong relationship to its fellows in Factor III. A reasonable conclusion, however, is that cleaning one's room is in quite a different category than simply picking up a tray of food which one will eat and, hopefully, enjoy. The amount of energy needed, the natural concern about infection, the fact that rooms are usually shared while food and bed usually are not, might have been sufficient cause to create a separate factor.

Factor VI, containing one of the satisfaction items (Item 16), named "Pleased With Accomplishment", was identified only among the overall factors. While it is logical to accept the evidence that

one's satisfaction with accomplishments influences the perceptions of one's world, it is difficult to tell whether or not this "accomplishment" was specifically related to hospitalization in this case.

Factor VII, "Staff Motivation to Perform", was basically a staff factor. The one item (Q36) loading here (.62) was the one intended to describe Likert's System I style of organization. Therefore, the degree to which the staff perceived themselves to be "following orders just because of what might happen to them if they don't" was affecting their attitude toward their work. Since the mean staff responses to the Likert questionnaire in the "as it is now" category showed both hospital organizations tending toward the non-participative end of the continuum, one can conclude that the style of management in both hospitals was indeed having some effect on staff attitudes and quality of care. There is no evidence in this research to suggest this effect to be significant, however.

Herbert (1959, 1968) and Bradburn's (1965) findings that satisfaction and dissatisfaction were quite distinct variables was upheld in this research. Factor VIII, the "Absence of Depression" proved to be an important factor having both a significant hospital effect ( $p < .05$ ) and a significant interaction between hospital and status ( $p < .0005$ ). Item nine, the one item involved here asked respondents to indicate how frequently they felt depressed and unhappy. The significant effects will be discussed in more detail shortly.

Factor IX, "Happiness/Co-operation" was a peculiar factor in that none of the items weighing on it met the .45 criteria yet the univariate analysis of variance noted in Table 9 shows a significant ( $p < .005$ ) status effect. Two items most clearly related to Factor IX, one referring to "feeling happy in the hospital (Item 26) and one referring to "doctors and nurses working together" (Item 32).

As mentioned in the description of the method, the staff respondents also completed Likert's "Profile of Organizational Characteristics, Form S" (1967). The responses to these items were

TABLE 9

Univariate and multivariate analysis of variance of factor scores  
by hospital and by status

Source	df	Univariate									Multivariate	
		F									df	F
		FS1	FS2	FS3	FS4	FS5	FS6	FS7	FS8	FS9		
Hospital (A)	1	0.00	8.11***	0.74	0.09	0.14	0.05	1.03	3.59**	0.23	9,162	1.78
Status (B)	1	61.79****	34.88****	0.12	0.25	1.40	1.61	0.00	0.09	14.77****	9,162	18.69****
A x B	1	0.61	0.53	3.83**	0.69	0.78	0.29	1.76	13.76****	0.54	9,162	2.91***

\*  $p < .10$ \*\*  $p < .05$ \*\*\*  $p < .005$ \*\*\*\*  $p < .0005$ \*\*\*\*\*  $p < .0001$



factor analysed with the main questionnaire. Surprisingly, not one of the six organizational dimensions measured by the Likert form grouped with any of the hospitalization items. This would lead one to conclude that the two instruments were measuring quite different things. In fact, some question may be entertained as to the direct application of the Likert form to the hospital context.

Overall, the multivariate analysis of variance in Table 9 revealed a slightly significant difference between the hospitals, ( $p < .10$ ), which was not expected, and a great significance between the patient and staff groups ( $p < .0001$ ), which was expected, and a more moderately significant interaction effect ( $p < .0005$ ). The univariate analysis of variance in the same table attributes these significant effects primarily to Factors I, II, III, VIII and IX. These will now be examined in some detail.

Factor I, Support/Competency, was shown to have a significant difference between the patient and staff groups ( $p < .0001$ ). Table 10 shows that the mean patient responses from both hospitals were considerably and consistently higher than were the mean staff responses. In other words the patients tended to see the hospital as being a more supportive and clinically efficient place than did the staff.

Several items warrant special attention. Item 20, regarding the staff's enjoyment of their work, which was identified by a stepwise discriminant function analysis as the single item which best distinguished between patients and staff, showed staff means of 11.8 and 12.1 for hospitals I and II respectively, and patient means of 15.5 and 16.0. The staff, then, did not enjoy their work as much as the patients thought they did.

Likewise Item 15, regarding the degree to which medical staff and patients worked as a team, showed that patients viewed themselves as a part of the team much more than the staff considered them to be (Staff means for HI=11.2, HII=9.8; patient means for HI=14.6, HII=15.3). There is a particularly great discrepancy in the Hospital II figures. Patients, apparently, did not perceive the lack of enjoyment of work felt, by the staff, and they also tended to over-estimate the degree of camaraderie between patients and staff.

TABLE 10

Factor and item means for hospitalization questionnaire by status (staff vs patient) and hospital (hospital I vs hospital II); together with stepwise discriminant function analyses identifying items which best discriminate between staff and patients, and between hospitals

Discriminant Function		Hospital I vs Hospital II															
Patients vs Staff												Patients				Staff	
Factors and Items				Patients				Patients vs Staff				Patients				Staff	
Staff				Patients				Patients vs Staff				Patients				Staff	
Order of F to enter Entrance or remove				Standard Discriminant Coefficient				St. Disc. Fund. Coeff.				Order of Entrance or remove				St. Disc. Fund. Coeff.	
Fact Item				Fact Item				Fact Item				Fact Item				Fact Item	
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Fact Item																	

\* removed on step 13

\*\* removed on step 8

\*\*\* removed on step 27

\* removed on step 21

\*\* removed on step 22

Staff and patients also differed considerably in how well they thought the hospital was organized (Item 34). To the patients the hospital was a well-run place (HI=15.5, HII=15.4) while the staff did not view it nearly as positively (HI=10.1, HII=11.3).

The tendency for patients to have a far more favourable perspective than the staff also held true for other important items such as the doctors respecting the patients' need for privacy (Item 13), the doctors showing personal concern for patients (Item 25) and the nurse's warmth and friendliness toward patients (Item 6). When the item referred to the behaviour of people other than a staff member or patient, a doctor for example, it was virtually impossible to tell which was the more realistic perception - the staff's or the patient's. However, when, as in Item 6, the patients in essence said, "The staff here are warm and friendly!" and the staff responded, "We are not as warm and friendly as you think!", then we need to question why the patient's perceptions differed so much from reality. The wisdom of exposing such discrepancies to either group will be discussed subsequently.

Item 4, questioning the patients' satisfaction with care given, revealed only minimal differences between the two groups. Both groups indicated a fairly high level of satisfaction with the quality of care. We have here evidence suggesting that the nursing staff were capable, to a considerable degree, of keeping separate what dissatisfaction they may have had with the hospital or their profession, and how they treat the patient.

One final item bears mention here. Means for Item 24, concerning the degree to which staff follow orders just because those in charge know what's best, indicated that patients thought this happened more frequently than did staff. It may have been that the patients operated on the assumption that staff simply follow orders, primarily those of the doctor who knows what's best. The staff indicated that though that was true most of the time, it wasn't as much the case as the patients thought. The factor analysis in Table 8 also indicated that

this item loads negatively on Factor I, meaning that the greater the support and competency, the more likely staff were to do things just because those in charge knew what was best. At first reading that interpretation may seem to be in the wrong direction and, perhaps, more explanation is justified. This item was designed to reflect Likert's System II or the "benevolent dictatorship" style of motivation. The non-participative or low scoring end of the continuum for this item indicated that staff performed for no other reason than the fact that those above them knew what was best. The high scoring end of the continuum carried with it the possibility that staff performed for other reasons as well, hopefully out of their sense of belonging, etc.

Though Item 24 does not load heavily on this factor, it does serve to point out the possibility that one component of a supportive, competent hospital environment is the historical phenomenon that staff follow orders because those in charge know what's best.

From Factor I, therefore, we may reasonably draw the conclusion that the patients perceived the nature and quality of their care as being satisfactory to a significantly greater degree than did the staff. This Support/Competency factor accounted for 48.5% of the total variance.

The Doctor/Patient Relations factor accounted for 14.2% of the total variance and contained a significant difference between hospitals ( $p < .005$ ) and between patients and staff ( $p < .0001$ ). On general observation of the means for the items grouped on this factor (see Table 10), it seems that the patients viewed their relationships to their doctors as being far more favourable than the staff thought they were. Patients for example, saw their doctors as usually trying to spend time with them while staff thought doctors only sometimes tried to spend time with patients. Patients also thought doctors gave them a fair amount of information about their condition, that they were warm and friendly most of the time and that they usually showed a personal concern for them. While it is not always obvious

from the means, the analysis of variance very clearly indicated a significantly more negative attitude about the doctors relationship to the patients.

The significant difference between the two hospitals was derived mainly from the staff responses, with those in Hospital I viewing doctor-patient relations more positively than did those in Hospital II. This seemed to be particularly true in regard to the doctor's warmth and friendliness (Item 10).

A significant ( $p < .05$ ) interaction effect was found in the Patient Tasks factor. The idea of patients picking up their own food trays and making their own beds received the most positive response from the patients of Hospital I and the staff of Hospital II. Their counterparts were not as inclined toward this form of patient involvement. This result is very difficult to interpret in a practical way since even the highest mean, from the patients of Hospital I on item 33, indicated that "food trays should always be brought to the patient." However, should there ever come a time when mobile patients pick up their own food trays, etc., those from Hospital I would be the first to co-operate. This may indicate a more favourable attitude toward the staff in Hospital I which would not be an unreasonable suggestion in light of the fact that in both factors I and II, that hospital scored more toward the positive participative end of the continuum than did Hospital II. The other side of the coin, however, is that the attitude of the staff of Hospital I may be interpreted as one in which patients are expected to stay in their rooms and have things done for them, which comes close to the traditional medical model.

Significant variance in Factor VIII, the "Absence of Depression" factor, was found to be between hospitals ( $p < .05$ ) and between hospitals and staff ( $p < .0005$ ). The between hospitals variance points to the fact that Hospital I tended to have less depression and unhappiness than did Hospital II, particularly on the part of the patients. This is supported by Factors VI, "Pleased With Accomplishment"

and Factor IX, "Happiness/Co-operation" in which Hospital I also had more positive results than Hospital II. Again it should be noted that satisfaction, represented in Factor VI, and the lack of depression and unhappiness were quite distinct factors, as expected in light of Herzberg (1959, 1968) and Bradburn's (1965) findings. However, other satisfaction items selected from Bradburn's work did not group on a satisfaction factor as expected. The most obvious explanation here, is that the nature of 'satisfaction' changes with the change in context from the general community to the hospital. Thus to identify levels of satisfaction within the hospital context one cannot simply ask people if they are satisfied or happy and receive reliable results.

The final factor in which significant variance was found was Factor IX "Happiness/Co-operation". Analysis of variance here pointed to a significance ( $p < .0005$ ) between patients and staff. This is an interesting factor, though one must be cautious in drawing conclusions since the items grouped under it did not load with sufficient weight to meet the .45 criteria.

In spite of this fact, the grouping of the items and the nature of their loadings point to several serious implications. Four main items grouped together here, namely: the degree to which staff follow orders just because those in charge know what's best (Item 24); feelings of happiness in the hospital (Item 26); doctors and nurses working together (Item 32); and nurses finding time to spend with individual patients (Item 7). Items 24 and 32 loaded negatively on this factor while 26 and 7 loaded positively.

The important implication, if one accepts the face value of these items, is that the more the staff were inclined to simply follow orders "just because those in charge know what's best", the less doctors and nurses were seen as working together. Further, the more that happened the happier the respondents (staff primarily) were in the hospital and the more time staff had to spend with patients.

To put it another way, simple "order following" did not produce

teamwork between doctor and nurse. That seemed to be alright with the nurses, however, and actually, they found more time to spend with patients. When patients received added attention their happiness increased which in turn gave them cause to think that doctors and nurses were working well together.

A consideration of the means of these items indicated that patients perceived staff more as following orders just because those in charge know what's best than did the staff themselves; staff were, understandably, happier than patients; patients saw doctors and nurses as working together to a considerably greater degree than did the staff respondents; and patients rated staff contact more positively than did the staff, (see Table 10).

Finally, though the Likert dimensions as identified on the Form S questionnaire did not relate at all to the dimensions tapped in the hospitalization questionnaire, the results were of sufficient implication to warrant making note of them here. From Figure 1 one can observe that in virtually all items staff respondents from Hospital II viewed their organization as tending more toward the participative (higher scores) than did those from Hospital I. In both hospitals, however, relatively few scores above Likert's System II category (benevolent dictatorship) were received when staff were asked to describe their hospital organization as they saw it "now".

Staff scores, when they were asked to describe their hospital as they would "like it to be", fell into Likert's System IV or the participative management category. Clearly there was a major discrepancy between how staff saw their hospital's organization in the present and how they wished to see it. Though more research and analysis would be needed to verify it, it is reasonable to expect that that discrepancy in no small way affects the staff's hospital experience.

# PROFILE OF ORGANIZATIONAL CHARACTERISTICS

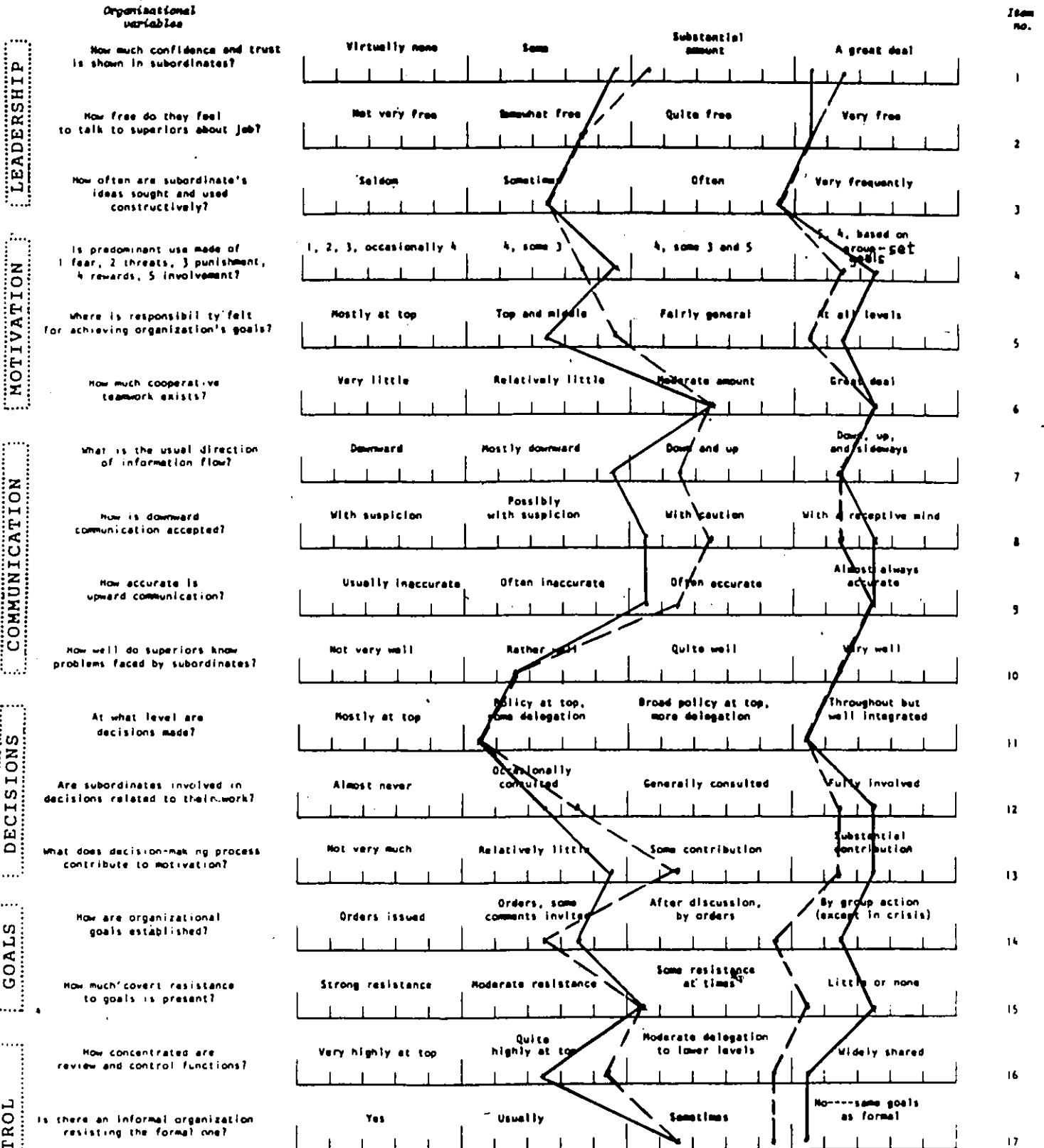


FIGURE 1

Profile of organizational characteristics for Hospital I and Hospital II resulting from mean "as it is now" and "like it to be" responses.

\_\_\_\_\_ Hospital I      - - - - - Hospital II



### PROFILE OF ORGANIZATIONAL CHARACTERISTICS

This questionnaire was developed for describing the management system or style used in a company or one of its divisions.

In completing the questionnaire, it is important that each individual answer each question as thoughtfully and frankly as possible. This is not a test; there are no right or wrong answers. The important thing is that you answer each question the way you see things or the way you feel about them.

#### *INSTRUCTIONS*

1. On the line below each organizational variable (item) please place an 'N' at the point which, in your experience, describes your hospital at the present time (N = now). Treat each item as a continuous variable from the extreme at one end to that at the other.
2. In addition, please place an 'L' at the point where you would like to have your hospital fall with regard to that item. (L = like).

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### Discussion

This research, motivated largely by concern for improving both the economy and quality of care in the Ontario health care delivery system, began by trying to discover the similarities and discrepancies between how professional staff perceived hospitalization and how medical-surgical patients perceived hospitalization. The idea was that before one can go about effecting positive change one must know what is presently going on.

Questionnaires were distributed to both patients and staff in two similar general hospitals in Southwestern Ontario. The analysis pointed to a very significant difference between the perceptions of patients and staff, a totally unexpected difference between hospitals and a significant interaction effect.

Due to the serendipitous nature of the between-hospital difference it is difficult to authoritatively offer explanation. However, in comparing Hospitals I and II one could describe Hospital II as an organization which tended to be slightly more participation-oriented in its management; which tended to have less re-location of staff from unit to unit; whose staff and patients tended to view doctor-patient relations as less participative; and whose patients reported more frequent feelings of depression and unhappiness. In Hospital II, it would seem that there was greater support and participation among management and staff than between staff and patient. Hospital I, on the other hand, tended to have more positive staff-patient interaction but more negative management-staff interaction. One might guardedly go as far as to suggest that Hospital II was more staff or professionally centered while Hospital I was more patient centered.

A possible and partial explanation might be that Hospital II has more doctors in its full-time employ than does Hospital I. Thus, constant contact (as distinct from short periodic visits by physicians) between resident doctors and staff may have resulted in a professional cohesiveness at the expense of necessary attention to the patient.

The staff-centered hospitalization process of Hospital II carried with it a tendency for staff to want patients to do more for themselves. However, since the patients did not, seemingly, view this message as being in their interest they were not as inclined to co-operate. The patient-centered process included a tendency for the staff to do more traditional caring (doing everything for the patient) than the patients needed or wanted. Carried to a greater extreme it may have been that staff's need to look after the patient thwarted the patient's interest in partially caring for himself.

Also clear in this research was the wide discrepancy between how patients and staff generally viewed the hospitalization phenomenon. Staff, while relatively discontent with their organizations (this being particularly evident from the Likert responses) were quite successful in not betraying this fact to the patients. Thus, if it is what is perceived that counts (Knutson, 1965; Ware, et al, 1975), then perhaps it is better to keep from the patient-consumer the realities of the health-care delivery system. In juxtaposition to that opinion, however, is the concept that if somehow the attitudes, satisfaction and competency of the staff could actually be raised to where the patients presently think they are, one could expect even greater satisfaction and co-operation from the patient. This latter option carries even greater weight with the realization that perhaps the time is coming when patients really will discover that the hospital exists to save them; that they, in fact, do not have the amount of information they think they have; and that perhaps they are being satisfied too easily.


Does anyone want to change? Patients seem to have indicated a willingness, however slight, to participate in their own care providing they perceive the request as coming from staff who are genuinely concerned for them and who are acting in the patient's interest. The other fact is that both the trial phase and main phase of this research showed a general unwillingness for participation if that participation involved responsibility.

Staff provided evidence that, in a general sense, they are not satisfied employees and that they wished to see a rather marked movement toward a participative organization. The finding that is most troublesome to this researcher is that staff satisfaction is negatively related to doctor and nurse teamwork (see Factor IX, Table 8). This suggests that nursing staff may have resigned themselves to the idea that doctors and nurses will not work as a team and that one must be content with "following orders just because those in charge know what's best".

Where then does change start? Patients cannot be expected to alter their role until they become aware of the realities and potential of health care, both in terms of their relationship to the hospital as an organization and in terms of their personal relationship to their physician. Staff may have already taken a posture of resignation in relation to altering their relationship to those above them.

Perhaps part of the answer lies in the one major frustration experienced by this researcher. The primary resistance to participating in this research, both from one of the hospitals who did eventually participate, and from most of those who refused, was generated by medical staff. Some doctors thought that the research would create patient discontent with them. One hospital in particular was, somewhat understandably, concerned about this in light of an unfortunate incident occurring a couple of years ago at the hospital, which caused a great deal of negative publicity. The other most frequent response from doctors implied that patients were incapable of filling out the questionnaire. As one doctor put it, "What would a patient know about doctor-nurse relationships?"

If the doctor, who has the most influence over both patient and nurse, refuses to even look at what is happening in health care, then any change at all may be long in coming. Citizen groups such as the Ontario Patient Rights Association and publications such as The Critical List (a publication by and for anti-establishment doctors) are gradually emerging and may lead the way in the evaluation of hospitalization.



These research results, then, confirmed the findings of Ellsworth and Maroney (1972) who identified the influence of doctor-centered and patient-centered approaches; White (1972) that both patients and nurses supported the importance of following orders; Fisher (1971) and Abdellah and Levine (1958) that patient satisfaction increased with the contact time with physicians and nurses; and Ware and Snyder's (1975) identification of physician conduct as a major determinant of patient attitudes.

The hypothesis that the level of both patient and staff satisfaction would increase with the degree of participation was not conclusively confirmed due to the major discrepancy between the patient's and staff's perceptions. There was, however, ample evidence that the relationship between these two factors was in the hypothesized direction.

Clearly confirmed was the hypothesis that patients would tend to perceive a more participative approach to hospitalization and staff would perceive a more traditional medical model of non-participation.

The hypothesis that patients would likely evidence more similarity to staff attitudes as the length of stay in the hospital increased was not validated since no significant length of stay factor was found.

The fact that a difference between hospitals was found contrary to expectations has been discussed at length.

Finally, because no relationship was found between the Likert questionnaire and the hospitalization questionnaire, it was impossible to establish a clear relationship between organizational variables and hospitalization variables. Again, however, there was a tendency for the two areas to be positively related as hypothesized.

#### Conclusions and Implications

Several practical conclusions may be drawn from this research, the implications of which are important to bettering health care delivery.

Even very similar general hospitals may be distinguishable from each other on the basis of whether they are professionally/staff oriented or patient oriented. Staff-oriented hospitals seem to produce an

increase in patient depression and unhappiness and a hesitancy to participate in their own care. In a patient oriented process there is less staff cohesiveness and staff have a tendency to try and do everything for the patient rather than take advantage of the patient's willingness to do some things for himself. Consequently, both staff development and patient education efforts should be designed to balance these respective tendencies. It may be, for example, that to conduct a staff development program which is designed to encourage staff cohesiveness in an already staff oriented hospital would be to worsen patient attitudes.

The major discrepancy found between staff and patient perceptions surfaces a major problem in health care. It seems clear that sooner or later the patient consumer is going to come to the realization that he or she has been somewhat naive in their expectations and evaluations of hospital care. Unless professional staff lead the way to honest and realistic consumer education and begin to willingly provide the medical information and quality care to which the patient has always been entitled, then these things will happen as a result of consumer action groups. Should the latter possibility materialize one can expect a widening of the gap presently existing between medical people and the patient.

A corollary of this conclusion is the fact that the patient-consumer must be taught that along with patient rights goes responsibility. It is unreasonable for patients, upon hospital admission, to suddenly resign all responsibility for their own life's welfare and to bestow it on the health care professional.

Accepting responsibility for one's decisions or behaviour comes easier with knowledge. Though not a direct focus of this research, it is reasonable to conclude that the primary responsibility for the education of the patient lies with the doctor. From the resistance received from several doctors by this researcher, perhaps one of the first obstacles that needs to be overcome is the tendency for some doctors to regard patients as intellectually inferior. Patients may

actually be able to understand what a gallstone is or what causes hemorrhoids, providing they are taught. Courses in teaching patients taken as an integral part of their medical training may begin to provide doctors with the necessary skills.

Finally, there proved to be a strong desire on the part of nursing staff to move from the medical model of dictatorship to one of teamwork and participative organization. Organizational development efforts in this regard must be done with a carefully balanced emphasis on both staff cohesiveness and staff-patient relations.

There is, of course, a great deal of room for the refinement of the research begun here. However, it seems to this researcher that the most important area for further investigation concerns doctor's attitudes - toward their patients, toward the hospital system and toward nursing staff. Without a better understanding of their perceptions, their frustrations and their objectives, the ultimate value of hospitalization research is questionable.

The second most important area for further research is hospital administration. How do administrative personnel perceive the hospitalization process in their own organization, and how do these perceptions compare to those of the doctors, patients and staff?

Continued research into the hospitalization process is both timely and critical. To bring about directed change in health care all must be willing to look at what is actually happening. To fail to do so at this point will inevitably lead to unrest and friction among those of us who say we care about people.

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APPENDIX A  
Patient Hospitalization Questionnaire

This questionnaire is part of a research study which will examine how both patients and hospital staff view hospitalization. Because we are trying to find ways of improving health care in the hospital, it is essential that we find out what you, the patient, think. That is why we really appreciate your willingness to work with us by filling in this questionnaire. It is important that you follow the instructions carefully and that you try to respond to each item as honestly as you can.

You can be very sure that your responses will be considered strictly confidential by the research team and that only the final general results will be used to help the hospital improve their care or for publication by the researcher.

### I N S T R U C T I O N S

- STEP I Please fill in and sign the "Research Consent Form" given to you with this questionnaire.
- STEP II On the next page you will find a few general questions about you. Please go ahead and answer all of these questions before going on to Step III. Note that your name does not appear on the questionnaire at all.
- STEP III The questionnaire is made up of 36 items, each of which deals with some aspect of hospital life, such as the friendliness of the nursing staff, the amount of information you are given by your doctor, etc. In each item are four statements each of which describe that item in a slightly different way. Regard these statements as though they were on a continuous scale ranging from one extreme at one end to another extreme at the other end. Read the four statements carefully and then mark an "X" at the point which is most true of your feelings and experiences during your stay in the hospital.

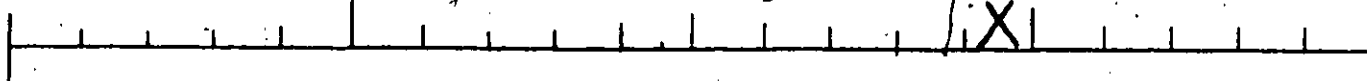
#### EXAMPLE:

Patients should  
never be allowed  
out of bed.

Patients should  
occasionally be  
allowed to get  
out of bed.

Patients should  
be able to get  
out of bed when  
they feel like  
doing so.

Patients should  
be encouraged to  
get out of bed as  
often as possible.



If you, for example, agree most with statement three but also agree a little with statement four, you might mark your "X" as in the example.

Please respond to all of the items in this fashion.

h

GENERAL INFORMATION

We would appreciate it if you would answer these few general questions about yourself.

What is your age? \_\_\_\_\_

What is your sex? \_\_\_\_\_

Are you: married \_\_\_\_\_ single \_\_\_\_\_ divorced \_\_\_\_\_ widowed \_\_\_\_\_

How long do you expect to be in the hospital? \_\_\_\_\_ days.

How long have you been in the hospital up to this date? \_\_\_\_\_

How serious do you think your condition is?

\_\_\_\_\_ Very serious

\_\_\_\_\_ Serious

\_\_\_\_\_ Not very serious

Thank you. Please go on to STEP III.

ITEM NO.

- |    |   |  |  |   |
|----|---|--|--|---|
| 1. | Nurses here are always friendly and co-operative with each other. | Nurses here are usually quite friendly and co-operative with each other. | Nurses here are sometimes friendly and co-operative with each other. | Nurses here are not very friendly and co-operative with each other. |
|----|---|--|--|---|

- |    |   |  |   |   |
|----|---|--|---|---|
| 2. | Patients should be responsible for making and changing their own beds if at all possible. | Patients should help staff with beds as often as possible. | Patients should help staff make their beds if the staff are busy. | Patients should never be expected to make their own beds. |
|----|---|--|---|---|

- |    |   |   |  |   |
|----|---|---|--|---|
| 3. | Those in charge here always run things by asking for staff opinions and then making up their own minds as to what's to be done. | Those in charge here frequently run things by asking for staff opinions and then making up their own minds as to what's to be done. | Those in charge here sometimes run things by asking for staff opinions and then making up their own minds as to what's to be done. | Those in charge here seldom run things by asking for staff opinions and then making up their own minds as to what's to be done. |
|----|---|---|--|---|

- |    |   |  |   |  |
|----|---|--|---|--|
| 4. | I have been very satisfied with the care I have been given. | I have been satisfied with the care I have been given. | I have been dissatisfied with the care I have been given. | I have been very dissatisfied with the care I have been given. |
|----|---|--|---|--|

- |    |  |   |   |  |
|----|--|---|---|--|
| 5. | The nurses here always seem to know exactly what they are doing. | The nurses here usually seem to know exactly what they are doing. | The nurses here sometimes seem to know exactly what they are doing. | The nurses here seldom seem to know exactly what they are doing. |
|----|--|---|---|--|

- |    |   |   |  |   |
|----|---|---|--|---|
| 6. | Nurses here are always warm and friendly toward patients. | Most of the time nurses here are warm and friendly toward patients. | The nurses here are sometimes warm and friendly toward patients. | The nurses here are seldom warm and friendly toward patients. |
|----|---|---|--|---|

7. Nurses here always find time to spend with each individual patient.      Nurses here generally try to find time to spend with each individual patient.      Usually nurses here seem to have little time to spend with an individual patient.      Nurses here seldom seem to have any time to spend with an individual patient.

8. My doctor never gives me any information about my condition.      My doctor only gives me a little information about my condition.      My doctor gives me a fair amount of information about my condition.      My doctor goes out of his way to make sure that I understand my condition.

9. I have very frequently felt depressed and unhappy while a patient.      Occasionally I have felt depressed and unhappy while a patient.      I have seldom felt depressed and unhappy while a patient.      I have never felt depressed and unhappy while a patient.

10. Doctors seldom seem warm and friendly toward their patients.      Sometimes doctors are warm and friendly toward their patients.      Most of the time doctors are warm and friendly toward their patients.      Doctors are almost always warm and friendly toward their patients.

11. I feel very pleased with my progress so far.      I am somewhat pleased with my progress so far.      I am only a little pleased with my progress so far.      I am not at all pleased with my progress so far.

12. I have a clear understanding as to what to expect from my medication and treatment. (surgery, physiotherapy, etc.)      Generally, I know what to expect from my medication and treatment.      I have only a vague idea of what to expect from my medication and treatment.      I have no idea as to what to expect from my medication and treatment.



13. My doctor always respects my need for privacy. Usually my doctor respects my need for privacy. My doctor sometimes tries to respect my need for privacy. My doctor seldom seems to recognize my need for privacy.

14. Doctors seldom seem to know exactly what they are doing. Doctors sometimes seem to know exactly what they are doing. Doctors usually seem to know exactly what they are doing. Doctors always seem to know exactly what they are doing.

15. Medical staff and patients always work together as a team in this hospital. Medical staff and patients usually work together as a team in this hospital. Medical staff and patients sometimes work together as a team in this hospital. Medical staff and patients seldom work together as a team in this hospital.

16. I am very frequently pleased about having accomplished something. I am sometimes pleased about having accomplished something. I am seldom pleased about having accomplished something. I am never pleased about having accomplished something.

17. My doctor seldom seems to have any time to spend with me. Sometimes my doctor will try to find some time to spend with me. Usually my doctor will try to spend some time with me. My doctor always seems to find time to spend with me.

18. Nurses here seldom seem to recognize a patient's need for privacy. Nurses here sometimes recognize a patient's need for privacy. Usually the nurses here recognize the patient's need for privacy. The nurses here always recognize and respect a patient's need for privacy.

19. My doctor always has full information as to how I've been doing since the last time I saw him. My doctor almost always has a good idea as to how I've been doing since the last time I saw him. My doctor usually has some idea as to how I've been doing since the last time I saw him. My doctor never seems to know how I've been doing since the last time I saw him.

20.	It is quite obvious that the staff at this hospital really enjoy their work.	Most of the time the staff at this hospital seem to really enjoy their work.	Sometimes the staff at this hospital do not seem to enjoy their work.	The staff at this hospital generally do not seem to enjoy their work.
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21.	Doctors always encourage and reassure their patients.	Most of the time doctors encourage and reassure their patients.	Sometimes doctors encourage and reassure their patients.	Doctors seldom offer encouragement and reassurance to their patients.
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22.	I never feel particularly excited or interested in something.	I seldom feel particularly excited or interested in something.	I sometimes feel particularly excited or interested in something.	I very frequently feel particularly excited or interested in something.
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23.	Doctors and nurses always believe the patient's reports about pain.	Usually doctors and nurses believe the patient's reports about pain.	Sometimes doctors and nurses believe the patient's reports about pain.	Doctors and nurses seldom believe the patient's reports about pain.
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24.	Staff here always seem to follow orders just because they feel that those in charge know what's best.	Staff here frequently seem to follow orders just because they feel that those in charge know what's best.	Staff here sometimes seem to follow orders just because they feel that those in charge know what's best.	Staff here seldom seem to follow orders just because they feel that those in charge know what's best.
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25.	Doctors always show a personal concern for their patients.	Doctors usually show a personal concern for their patients.	Sometimes doctors show a personal concern for their patients.	Most of the time doctors do not show a personal concern for their patients.
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26.	During my stay in the hospital I have felt very happy.	During my stay in the hospital I have felt pretty happy.	During my stay in the hospital I have felt somewhat happy.	During my stay in the hospital I have not felt too happy.
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27.	The cleanliness and orderliness of a hospital room is solely the responsibility of the staff.	Patients should make some effort to keep their rooms clean and orderly.	Patients should work with staff in keeping the room clean and orderly.	If at all possible, patients should be responsible for keeping the room clean and orderly.
-----	---	---	--	--

28.	There is always a feeling of co-operation among the staff in this hospital.	There is frequently a feeling of co-operation among the staff in this hospital.	There is sometimes a feeling of co-operation among the staff in this hospital.	There is seldom a feeling of co-operation among the staff in this hospital.
-----	---	---	--	---

29.	Nurses here seldom seem to know why the Doctor is ordering certain medication and treatments.	Sometimes the nurses here seem to understand why the doctor is ordering certain treatments and are able to explain them to the patient.	Usually the nurses seem to understand why the doctor is ordering certain treatments and are able to explain them to the patient.	The nurses always seem to understand why the doctor is ordering certain treatments and are able to explain them fully to the patient.
-----	---	---	--	---

30.	I have no idea why certain tests (blood tests, urine or stool specimens, X-rays, etc.) are ordered for me.	I have only a vague idea as to why certain tests were ordered for me.	I have a general idea as to why certain tests were ordered for me.	I have been well-informed as to why certain tests have been ordered for me.
-----	--	---	--	---

31.	I can't tell if my doctor is up-to-date in his knowledge of medicine.	Periodically my doctor seems to be up-to-date in his knowledge of medicine.	My doctor often seems to be up-to-date in his knowledge of medicine.	My doctor clearly demonstrates that he is up-to-date in his knowledge of medicine.
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32.	Doctors and nurses here really don't work together all that well.	Doctors and nurses here sometimes work well together.	Doctors and nurses here usually work well together.	Doctors and nurses here almost always work well together.
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33. If at all possible patients should help by picking up their own food trays. Patients should often try to help out by picking up their own food trays. If staff are busy patients should pick up their own food trays. Food trays should always be brought to the patient.

34. There are many occasions when this hospital does not seem very well organized. Occassionally this hospital does not seem to be very well organized. Usually this hospital seems to be pretty well organized. As far as I can tell this hospital seems very well organized all of the time.

35. I have very frequently felt lonely and remote from other people. I have sometimes felt lonely and remote from other people. I have seldom felt lonely and remote from other people. I have never felt lonely and remote from other people.

36. The staff here always seem to do things just because of what might happen to them if they don't. The staff here frequently seem to do things just because of what might happen to them if they don't. The staff here sometimes seem to do things just because of what might happen to them if they don't. The staff here seldom seem to do things just because of what might happen to them if they don't.

Thank you very much for your co-operation.

APPENDIX B  
Staff Hospitalization Questionnaire

This questionnaire is part of a research study which will examine how both patients and hospital staff view hospitalization. Because we are trying to find ways of improving health care in the hospital, it is essential that we find out what those of you who have the most patient contact think. That is why we really appreciate your willingness to work with us by filling in this questionnaire. It is important that you follow the instructions carefully and that you try to respond to each item as honestly as you can.

You can be very sure that your responses will be considered strictly confidential by the research team and that only the final general results will be used to help the hospital improve their care or for publication by the researcher.

### I N S T R U C T I O N S

STEP I Please fill in and sign the "Research Consent Form" given to you with this questionnaire.

STEP II On the next page you will find a few general questions about you. Please go ahead and answer all of these questions before going on to STEP III. Note that your name does not appear on the questionnaire at all.

STEP III The main questionnaire is made up of 37 items, each of which deals with some aspect of hospital life, such as the friendliness of nurses, the amount of information given to patients by doctors, etc. In each item are four statements each of which describe that item in a slightly different way. Regard these statements as though they were on a continuous scale ranging from one extreme at one end to another extreme at the other end. Read the four statements carefully and then mark an "X" at the point which is most true of your work experience in the hospital. The second questionnaire should be completed according to the directions on it.

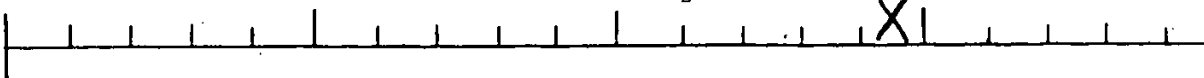
#### EXAMPLE:

Patients should never be allowed out of bed.

Patients should occasionally be allowed to get out of bed.

Patients should be able to get out of bed when they feel like doing so.

Patients should be encouraged to get out of bed as often as possible.



If you, for example, agree most with statement three but also agree a little with statement four, you might mark your "X" as in the example.

Please respond to all of the items in this fashion.

GENERAL INFORMATION

We would appreciate it if you would answer these few general questions about yourself.

What is your age? \_\_\_\_\_

What is your sex? \_\_\_\_\_

Are you: married \_\_\_\_\_ single \_\_\_\_\_ divorced \_\_\_\_\_ widowed \_\_\_\_\_

Are you a: (check all that apply) Head Nurse \_\_\_\_\_ R.N. \_\_\_\_\_ R.N.A. \_\_\_\_\_

B.Sc.N. or B.A. \_\_\_\_\_ Master's Degree \_\_\_\_\_

Special Diploma (describe ) \_\_\_\_\_

How long have you been working at this hospital? \_\_\_\_\_

On this particular unit? \_\_\_\_\_

Do you work: Full time \_\_\_\_\_ Part time \_\_\_\_\_

What type of unit are you presently working on? (i.e. Geriatric, Medical-Surgical, etc.) \_\_\_\_\_

Thank you. Please go on to STEP III.

ITEM NO.

- |    |   |  |  |   |
|----|---|--|--|---|
| 1. | Nurses here are always friendly and co-operative with each other. | Nurses here are usually quite friendly and co-operative with each other. | Nurses here are sometimes friendly and co-operative with each other. | Nurses here are not very friendly and co-operative with each other. |
|----|---|--|--|---|

- |    |   |  |   |   |
|----|---|--|---|---|
| 2. | Patients should be responsible for making and changing their own beds if at all possible. | Patients should help staff with beds as often as possible. | Patients should help staff make their beds if the staff are busy. | Patients should never be expected to make their own beds. |
|----|---|--|---|---|

- |    |   |   |  |   |
|----|---|---|--|---|
| 3. | Those in charge here always run things by asking for staff opinions and then making up their own minds as to what's to be done. | Those in charge here frequently run things by asking for staff opinions and then making up their own minds as to what's to be done. | Those in charge here sometimes run things by asking for staff opinions and then making up their own minds as to what's to be done. | Those in charge here seldom run things by asking for staff opinions and then making up their own minds as to what's to be done. |
|----|---|---|--|---|

- |    |  |   |  |   |
|----|--|---|--|---|
| 4. | I have been very satisfied with the care I have been giving. | I have been satisfied with the care I have been giving. | I have been dissatisfied with the care I have been giving. | I have been very dissatisfied with the care I have been giving. |
|----|--|---|--|---|

- |    |  |   |   |  |
|----|--|---|---|--|
| 5. | The nurses here always seem to know exactly what they are doing. | The nurses here usually seem to know exactly what they are doing. | The nurses here sometimes seem to know exactly what they are doing. | The nurses here seldom seem to know exactly what they are doing. |
|----|--|---|---|--|

- |    |   |   |  |   |
|----|---|---|--|---|
| 6. | Nurses here are always warm and friendly toward patients. | Most of the time nurses here are warm and friendly toward patients. | The nurses here are sometimes warm and friendly toward patients. | The nurses here are seldom warm and friendly toward patients. |
|----|---|---|--|---|



7. Nurses here always find time to spend with each individual patient.

Nurses here generally try to find time to spend with each individual patient.

Usually nurses here seem to have little time to spend with an individual patient.

Nurses here seldom seem to have any time to spend with an individual patient.

8. The doctors never give patients any information about their condition.

The doctors only give patients a little information about their condition.

The doctors give patients a fair amount of information about their condition.

The doctors go out of their way to make sure that patients understand their condition.

9. I have very frequently felt depressed and unhappy.

Occasionally I have felt depressed and unhappy.

I have seldom felt depressed and unhappy.

I have never felt depressed and unhappy.

10. Doctors seldom seem warm and friendly toward their patients.

Sometimes doctors are warm and friendly toward their patients.

Most of the time doctors are warm and friendly toward their patients.

Doctors are almost always warm and friendly toward their patients.

11. Patients here are very well informed by their doctor concerning what they need to do to get better.

Patients here are well informed by their doctor concerning what they need to do to get better.

Patients here are poorly informed by their doctor concerning what they need to do to get better.

Patients here are very poorly informed by their doctor concerning what they need to do to get better.

12. Patients have a clear understanding as to what to expect from their medication and treatment.

Patients generally know what to expect from their medication and treatment.

Patients have only a vague idea of what to expect from their medication and treatment.

Patients have no idea as to what to expect from their medication and treatment.

- |     |   |   |   |   |
|-----|---|---|---|---|
| 13. | Doctors always respect the patient's need for privacy.  | Usually doctors respect the patient's need for privacy.   | Doctors sometimes try to respect patient's need for privacy.  | Doctors seldom seem to recognize the patient's need for privacy.                          |
| 14. | Doctors seldom seem to know exactly what they are doing.  | Doctors sometimes seem to know exactly what they are doing.   | Doctors usually seem to know exactly what they are doing.   | Doctors always seem to know exactly what they are doing.                                  |
| 15. | Medical staff and patients always work together as a team in this hospital.                               | Medical staff and patients usually work together as a team in this hospital.                                | Medical staff and patients sometimes work together as a team in this hospital.                      | Medical staff and patients seldom work together as a team in this hospital.               |
| 16. | I am very frequently pleased about having accomplished something.   | I am sometimes pleased about having accomplished something.   | I am seldom pleased about having accomplished something.  | I am never pleased about having accomplished something.                                   |
| 17. | Doctors seldom seem to have any time to spend with their patients.  | Sometimes doctors will try to find some time to spend with their patients.                                  | Usually doctors will try to spend some time with their patients.                                    | Doctors always seem to find time to spend with their patients.                            |
| 18. | Nurses here seldom seem to recognize a patient's need for privacy.  | Nurses here sometimes recognize a patient's need for privacy.   | Usually the nurses here recognize the patient's need for privacy.                                   | The nurses here always recognize and respect a patient's need for privacy.                |
| 19. | Doctors always have full information as to how the patient has been doing since the last time he saw him. | Doctors almost always have a good idea as to how the patient has been doing since the last time he saw him. | Doctors usually have some idea as to how the patient has been doing since the last time he saw him. | Doctors never seem to know how the patient has been doing since the last time he saw him. |

20. It is quite obvious that the staff at this hospital really enjoy their work. Most of the time the staff at this hospital seem to really enjoy their work. Sometimes the staff at this hospital do not seem to enjoy their work. The staff at this hospital generally do not seem to enjoy their work.
21. Doctors always encourage and reassure their patients. Most of the time doctors encourage and reassure their patients. Sometimes doctors encourage and reassure their patients. Doctors seldom offer encouragement and reassurance to their patients.
22. I never feel particularly excited or interested in something. I seldom feel particularly excited or interested in something. I sometimes feel particularly excited or interested in something. I very frequently feel particularly excited or interested in something.
23. Doctors and nurses always believe the patient's reports about pain. Usually doctors and nurses believe the patient's reports about pain. Sometimes doctors and nurses believe the patient's reports about pain. Doctors and nurses seldom believe the patient's reports about pain.
24. Staff here always seem to follow orders just because they feel that those in charge know what's best. Staff here frequently seem to follow orders just because they feel that those in charge know what's best. Staff here sometimes seem to follow orders just because they feel that those in charge know what's best. Staff here seldom seem to follow orders just because they feel that those in charge know what's best.
25. Doctors always show a personal concern for their patients. Doctors usually show a personal concern for their patients. Sometimes doctors show a personal concern for their patients. Most of the time doctors do not show a personal concern for their patients.
26. During my work in the hospital I have felt very happy. During my work in the hospital I have felt pretty happy. During my work in the hospital I have felt somewhat happy. During my work in the hospital I have not felt too happy.

27.	The cleanliness and orderliness of a hospital room is solely the responsibility of the staff.	Patients should make some effort to keep their rooms clean and orderly.	Patients should work with staff in keeping the room clean and orderly.	If at all possible, patients should be responsible for keeping the room clean and orderly.
-----	---	---	--	--

28.	There is always a feeling of co-operation among the staff in this hospital.	There is frequently a feeling of co-operation among the staff in this hospital.	There is sometimes a feeling of co-operation among the staff in this hospital.	There is seldom a feeling of co-operation among the staff in this hospital.
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29.	Nurses here seldom seem to know why the Doctor is ordering certain medication and treatments.	Sometimes the nurses here seem to understand why the doctor is ordering certain treatments and are able to explain them to the patient.	Usually the nurses seem to understand why the doctor is ordering certain treatments and are able to explain them to the patient.	The nurses always seem to understand why the doctor is ordering certain treatments and are able to explain them fully to the patient.
-----	---	---	--	---

30.	Patients here have no idea why certain tests (blood tests, urine or stool specimens, X-rays, etc.) are ordered for them.	Patients here have only a vague idea as to why certain tests were ordered for them.	Patients here have a general idea as to why certain tests were ordered for them.	Patients here have been well-informed as to why certain tests have been ordered for them.
-----	--	---	--	---

31.	I can't tell if a doctor is up-to-date in his knowledge of medicine.	Periodically doctors seem to be up-to-date in their knowledge of medicine.	Doctors often seem to be up-to-date in their knowledge of medicine.	Doctors clearly demonstrate that they are up-to-date in their knowledge of medicine.
-----	--	--	---	--

32.	Doctors and nurses here really don't work together all that well.	Doctors and nurses here sometimes work well together.	Doctors and nurses here usually work well together.	Doctors and nurses here almost always work well together.
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33.	If at all possible patients should help by picking up their own food trays.	Patients should often try to help out by picking up their own food trays.	If staff are busy patients should pick up their own food trays.	Food trays should always be brought to the patient.
-----	---	---	---	---

34.	There are many occasions when this hospital does not seem very well organized.	Occasionally this hospital does not seem to be very well organized.	Usually this hospital seems to be pretty well organized.	As far as I can tell this hospital seems very well organized all of the time.
-----	--	---	--	---

35.	I have very frequently felt lonely and remote from other people.	I have sometimes felt lonely and remote from other people.	I have seldom felt lonely and remote from other people.	I have never felt lonely and remote from other people.
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36.	The staff here always seem to do things just because of what might happen to them if they don't.	The staff here frequently seem to do things just because of what might happen to them if they don't.	The staff here sometimes seem to do things just because of what might happen to them if they don't.	The staff here seldom seem to do things just because of what might happen to them if they don't.
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37.	Doctors are always satisfied with the amount of information about their patients provided them by the nurses.	Doctors are often satisfied with the amount of information about their patients provided them by the nurses.	Doctors are sometimes satisfied with the amount of information about their patients provided them by the nurses.	Doctors are seldom satisfied with the amount of information about their patients provided them by the nurses.
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Organizational variables

# PROFILE OF ORGANIZATIONAL CHARACTERISTICS

## LEADERSHIP

## MOTIVATION

## COMMUNICATION

## DECISIONS

## GOALS

## CONTROL

	SYSTEM 1	SYSTEM 2	SYSTEM 3	SYSTEM 4
How much confidence and trust is shown in subordinates?	Virtually none	Some	Substantial amount	A great deal
How free do they feel to talk to superiors about job?	Not very free	Somewhat free	Quite free	Very free
How often are subordinate's ideas sought and used constructively?	Seldom	Sometimes	Often	Very frequently
Is predominant use made of: 1 fear, 2 threats, 3 punishment, 4 rewards, 5 involvement?	1, 2, 3, occasionally 4	4, some 3	4, some 3 and 5	5, 4, based on group-set goals
Where is responsibility felt for achieving organization's goals?	Mostly at top	Top and middle	Fairly general	At all levels
How much cooperative teamwork exists?	Very little	Relatively little	Moderate amount	Great deal
What is the usual direction of information flow?	Downward	Mostly downward	Down and up	Down, up, and sideways
How is downward communication accepted?	With suspicion	Possibly with suspicion	With caution	With a receptive mind
How accurate is upward communication?	Usually inaccurate	Often inaccurate	Often accurate	Almost always accurate
How well do superiors know problems faced by subordinates?	Not very well	Rather well	Quite well	Very well
At what level are decisions made?	Mostly at top	Policy at top, some delegation	Broad policy at top, more delegation	Throughout but well integrated
Are subordinates involved in decisions related to their work?	Almost never	Occasionally consulted	Generally consulted	Fully involved
What does decision-making process contribute to motivation?	Not very much	Relatively little	Some contribution	Substantial contribution
How are organizational goals established?	Orders issued	Orders, some comments invited	After discussion, by orders	By group action (except in crisis)
How much covert resistance to goals is present?	Strong resistance	Moderate resistance	Some resistance at times	Little or none
How concentrated are review and control functions?	Very highly at top	Quite highly at top	Moderate delegation to lower levels	Widely shared
Is there an informal organization resisting the formal one?	Yes	Usually	Sometimes	No-----same goals as formal

Item No.

1

2

3

4

5

6

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**PROFILE OF ORGANIZATIONAL CHARACTERISTICS**

This questionnaire was developed for describing the management system or style used in a company or one of its divisions.

In completing the questionnaire, it is important that each individual answer each question as thoughtfully and frankly as possible. This is not a test; there are no right or wrong answers. The important thing is that you answer each question the way you see things or the way you feel about them.

**INSTRUCTIONS**

1. On the line below each organizational variable (item) please place an 'N' at the point which, in your experience, describes your hospital at the present time (N = now). Treat each item as a continuous variable from the extreme at one end to that at the other.
2. In addition, please place an 'L' at the point where you would like to have your hospital fall with regard to that item. (L = like).

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Ann Arbor, Michigan 48108

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## IAN D. PERCY

Management and Organizational Consultant

### HISTORY

IAN D. PERCY & ASSOCIATES, as a formal organization, is the product of an active interest in developing the effectiveness of organizations and individuals, and what seems to be a lack of consulting agencies concerned with human growth as well as organizational efficiency.

My interest began during the early part of my training for the ministry and was heightened during my studies in organizational psychology at the University of Windsor. This training, in combination with several years of experience in a large local hospital and an increasing number of invitations to consult to other hospitals and related organizations, confirmed my feelings about the direction my professional life should take.

I receive a great deal of reinforcement from working with people and organizations who are prepared to take the time and to spend the energy required to discover more of who they are, to identify and develop their personal and corporate strengths, and to effectively utilize these strengths in achieving common goals.

My own skills and interests focus primarily on hospital, nursing home, and church consulting. My work involves such areas as organizational systems planning, interpersonal skill development, team building, and management training.

### EDUCATION

Ontario Bible College, Toronto, Ontario - Bachelor of Religious Education (majors in education and theology), 1969.

University of Windsor, Windsor, Ontario - Bachelor of Arts (honors) (major in psychology), 1972.

University of Windsor, Windsor, Ontario - Master of Arts (major in organizational psychology), 1976.

### WORK EXPERIENCE

Internal Consultant, Inservice Education Department, Metropolitan General Hospital, Windsor, Ontario. 1972 - 1973.

Nursing Service Department, Metropolitan General Hospital, Windsor, Ontario. 1969 - 1972.

Pastor, Ballantrae Christian Church, Ballantrae, Ontario. 1968 - 1969.



### TEACHING EXPERIENCE

Hospital Supervision, St. Clair College, Windsor, Ontario. (Instructor)

Group Process, University of Windsor, Windsor, Ontario. (Lab Instructor)

Introduction to Counselling Psychology, University of Windsor, Windsor, Ontario. (Lab Instructor)

### PUBLICATIONS AND PRESENTATIONS

Incidence of Gallbladder Disease in Canada, England, and France. Plant, J. and Percy, I. The Lancet, August, 1973.

Handbook for the Chronically Ill. Berkeley, J. and Percy, I. et al., Chronic Care Centre, Windsor, Ontario, 1973.

For Administrators Who Feel Drained, presented May, 1974 at the Seminar on Aging, The Committee for Continuing Health Care, Windsor, Ontario.

The Group and Organizational Context in Consultation: An Experiential Workshop. Kaplan, M., Skilling, D., and Percy, I., Canadian Psychological Association, Windsor, Ontario. June, 1974.

Personal Development and Management Effectiveness, given May 22, 1975 at the Ontario Hospital Association's annual seminar for Food Service Personnel. (Invited Address)

Professionalism - A Way of Life, given May 30, 1975 at the annual meeting of the Ontario Medical Record Technicians. (Invited Address).

God, Business and Effective Living, presented to the Ontario Association of Christian Businessmen, Guelph, Ontario, March 8, 1975 (Invited Address)

### RELATED EXPERIENCE AND INTERESTS

Organizational Consultant, The Institute of Family Living, Toronto, Ontario.

Chairman, Nursing Education Advisory Committee, St. Clair College, Windsor, Ontario.

Member, Christian Association for Psychological Studies, Grand Rapids, Michigan.

Member, Board of Governors, Windsor Youth for Christ, Inc., Windsor, Ontario.

Member, The Health Care Public Relations Association, Ontario.

CONSULTING EXPERIENCE (representative list)

Lady Minto Hospital,  
Cochrane, Ontario.

Temiskaming Hospitals,  
Haileybury, Ontario.

Notre-Dame Hospital,  
Hearst, Ontario.

Hotel Dieu Hospital,  
Windsor, Ontario.

Beacon Hill Nursing Home,  
Windsor, Ontario.

Essex Nursing Home,  
Essex, Ontario.

United Churches of Windsor,  
Windsor, Ontario.

Christian Businessmen's Association,  
Windsor, Ontario.

Detroit Board of Education,  
Detroit, Michigan.

Big Brother Association,  
Windsor, Ontario.

Pharmaceutical Consultants, Inc.,  
Winnipeg, Manitoba.

Smith, Klymas, Selk & Co.,  
Chartered Accountants,  
Toronto,  
Mississauga,  
Windsor,  
Vancouver.

Sensenbrenner Hospital,  
Kapuskasing, Ontario.

Metropolitan General Hospital,  
Windsor, Ontario.

Kirkland and District Hospital,  
Kirkland Lake, Ontario.

St. Mary's Hospital,  
Timmins, Ontario.

Techumseh Nursing Home,  
Techumseh, Ontario.

St. Andrews Presbyterian Church,  
Puce, Ontario.

Family Living Tours,  
Toronto, Ontario.

Institute on Psychology and  
Telecommunications,  
Canadian Psychological Association,  
Windsor, Ontario.

R. A. Clarke, Inc.,  
Ontario Land Surveyors,  
Windsor, Ontario.

Asbury Theological Seminary  
Lexington, Kentucky.

A.D.T. Security Systems, Inc.  
Toronto, Ontario.

Central Chrysler, Inc.,  
Windsor, Ontario.

Canada Life Assurance Co.,  
Windsor, Ontario.